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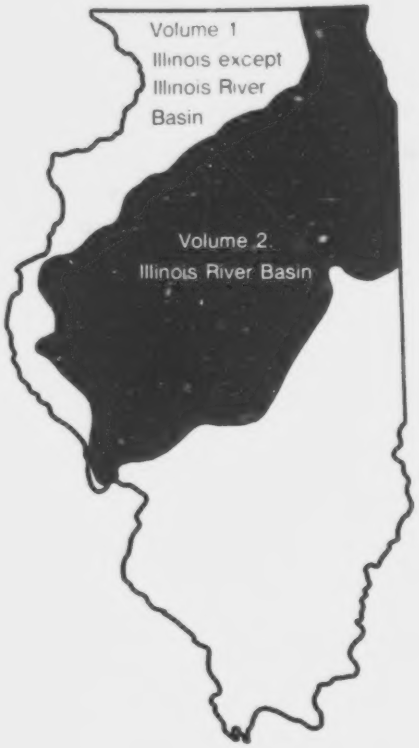
DEPARTMENT OF THE INTERIOR
March 3, 1849

AUG 26th 1818

Water Resources Data
Illinois
Water Year 1989

Volume 2. Illinois River Basin


Volume 1
Illinois except
Illinois River
Basin
Volume 2.
Illinois River Basin

U.S. GEOLOGICAL SURVEY WATER DATA REPORT IL-89-2
Prepared in cooperation with the State of Illinois
and with other agencies

I

CALENDAR FOR WATER YEAR 1989

1988

OCTOBER

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1989

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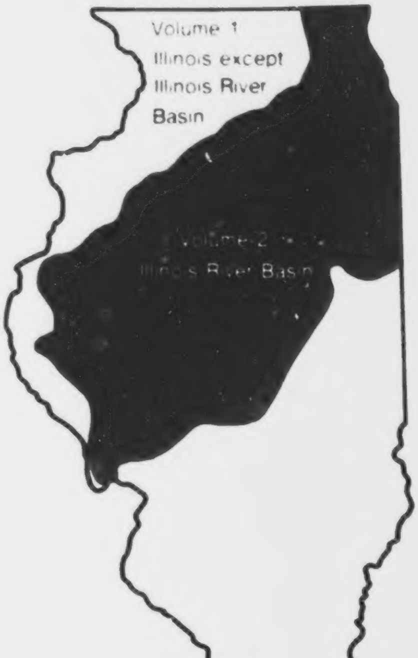
U.S. DEPARTMENT OF THE INTERIOR
March 3 1849

AUG 26th 1818

Water Resources Data
Illinois
Water Year 1989

Volume 2. Illinois River Basin

by D.J. Sullivan, P.D. Hayes, T.E. Richards, and J.C. Maurer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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IL-89-2
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and with other agencies

DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Illinois write to:

District Chief
Water Resources Division
U.S. Geological Survey
102 East Main Street, 4th Floor
Urbana, Illinois 61801

1990

PREFACE

This volume of the annual hydrologic data report of Illinois is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Illinos are contained in two volumes:

Volume 1. Illinois except Illinois River Basin

Volume 2. Illinois River Basin

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

De Kalb Office	Mt. Vernon Office	Urbana Office
D. J. Hector	P. J. Draper	A. L. Bewsher
W. S. Morrow	N. R. Kaufman	M. L. Harris
S. M. Robinson	J. R. Norris	A. W. Nyberg
T. L. Wicker		A. D. Robl
		J. M. Sterling

Mary Garrelts updated and typed the text of the report and deserves special recognition for assembling data from the above offices, organizing tables into two volumes, preparing tables of contents and indexes, and preparing and editing camera copy.

This report was prepared in cooperation with the State of Illinois and with other agencies under the general supervision of Richard P. Novitzki, District Chief.

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The Water Resources Division of the U.S. Geological Survey, in cooperation with State, Federal, and other local governmental agencies, obtains a large amount of data pertaining to the water resources of Illinois each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State.

Water resources data for the 1989 water year for Illinois consist of records of stage, discahrge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains (1) discharge for 82 streamflow-gaging stations and for 13 crest-stage, partial-record streamflow stations; (2) stage for 3 streamflow-gaging stations and for 3 lake stations; (3) water-quality records for 47 streamflow-gaging stations, 1 of which includes sediment discharge, and for 28 ungaged stream sites; and (4) water-level records for 7 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous discharge measurements and miscellaneous water-quality analyses.

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[Letter after station name designates type of data: (d) discharge, (g) gage height, (c) chemical, (m) microbiological, and (s) sediment]

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ILLINOIS RIVER BASIN

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DU PAGE COUNTY
Well 414217087592801 Local number 37N11E-9 8c 458
Well 414236087583301 Local number 37N11E-9 2f1 459
LAKE COUNTY
Well 422803087475301 Local number 46N12E-14 6g1 460
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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, Federal, and other local governmental agencies, obtains a large amount of data pertaining to the water resources of Illinois each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Illinois."

Water resources data for the 1989 water year for Illinois consist of records of stage, discharge, and water quality of streams, stage and contents of lakes and reservoirs, and water levels of ground-water wells. This volume (Volume 2. Illinois River basin) contains (1) discharge for 82 streamflow gaging stations and for 13 crest-stage, partial-record streamflow stations, (2) stage for 7 streamflow gaging stations and for 3 lake stations, (3) water quality records for 47 streamflow gaging stations, 1 of which include sediment discharge, and for 28 ungaged stream sites, and (4) water-level records for 7 observation wells. Locations of these sites are shown in figures 1 and 2. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous discharge measurements and miscellaneous water-quality analyses.

This series of annual reports for Illinois began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1965 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface water and ground water, and ground-water levels. Due to the large increase in water-resources data collected in Illinois, it was necessary to go to a two-volume format in 1978.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Illinois were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 3A, 4, and 5." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IL-89-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (217) 398-5353.

COOPERATION

The U.S. Geological Survey and agencies of the State of Illinois have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are:

Illinois Department of Transportation, G. W. Baise, Secretary, through Division of Water Resources, D. R. Vonnahme, Director.

Illinois Environmental Protection Agency, B. P. Killian, Director, through Division of Water Control, James Park, Manager, and Division of Public Water Supply, Roger Selburg, Manager.

Illinois Department of Energy and Natural Resources, K. A. Witter, Director, through Water Survey Division, R. G. Semonin, Chief.

Bloomington and Normal Sanitary District, J. M. Callahan, Executive Director.

Forest Preserve District of Cook County, G. W. Dunne, President, Board of County Commissioners, A. L. Janura, General Superintendent, Forest Preserve.

Forest Preserve District of Du Page County, H. C. Johnson, Executive Director, R. A. Hill, Project Engineer.

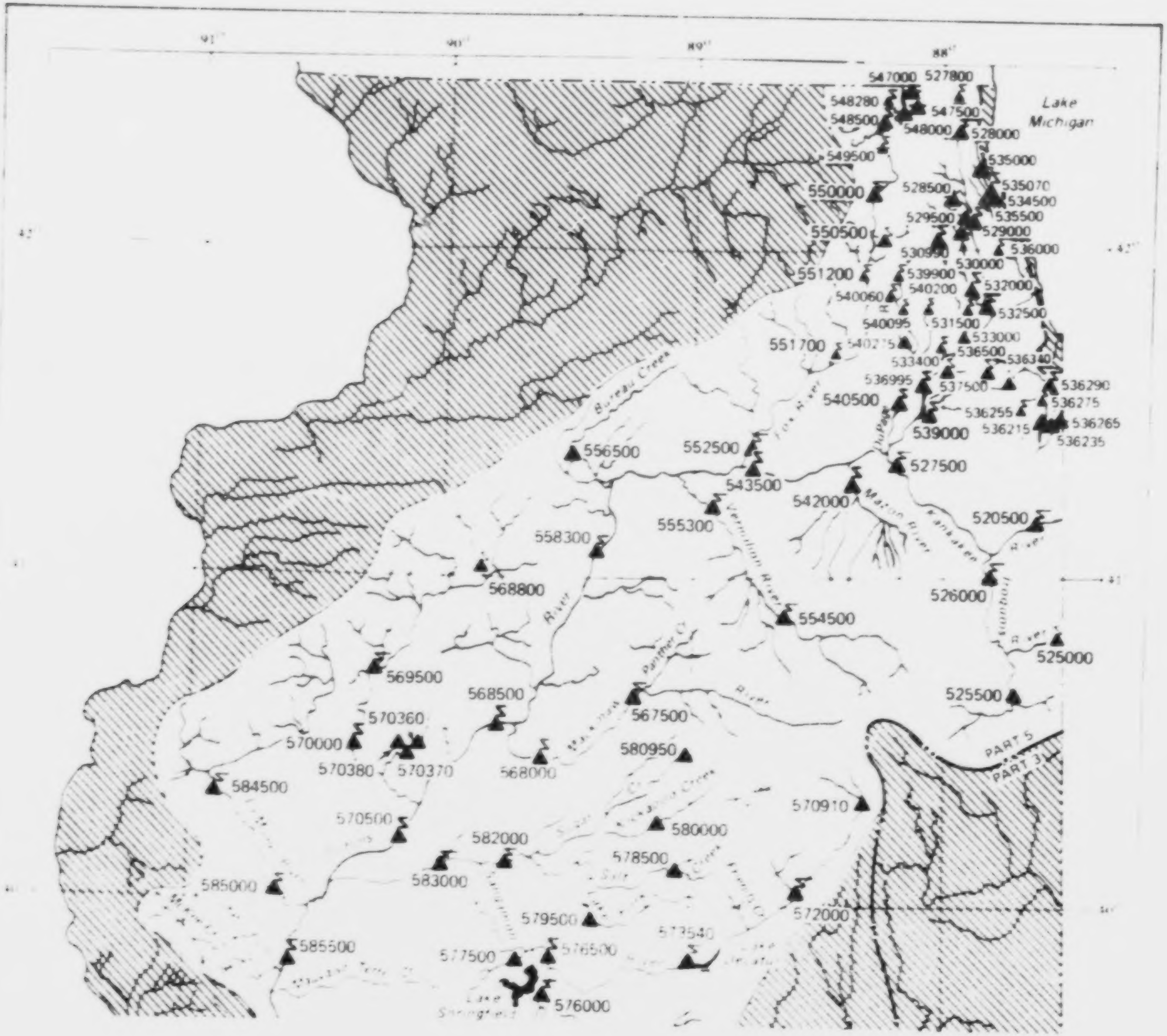
Du Page County Department of Environmental Concerns, J. T. Knuepfer, County Board Chairman.

Conservation District of Vermilion County, R. W. Pennock, Executive Director.

The Metropolitan Water Reclamation District of Greater Chicago, N. J. Melas, President, Cecil Lue-Hing, Director, Research and Development.

City of De Kalb, Ronald Naylor, Director, Public Works Department.

City of Decatur, W. B. Sands, Director, Public Works.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88°
42°
41°
40°
Lake Michigan
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527800
548280
548500
547500
548000
528000
549500
535000
550000
528500
535070
534500
535500
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550500
530900
536000
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551200
539900
540060
540200
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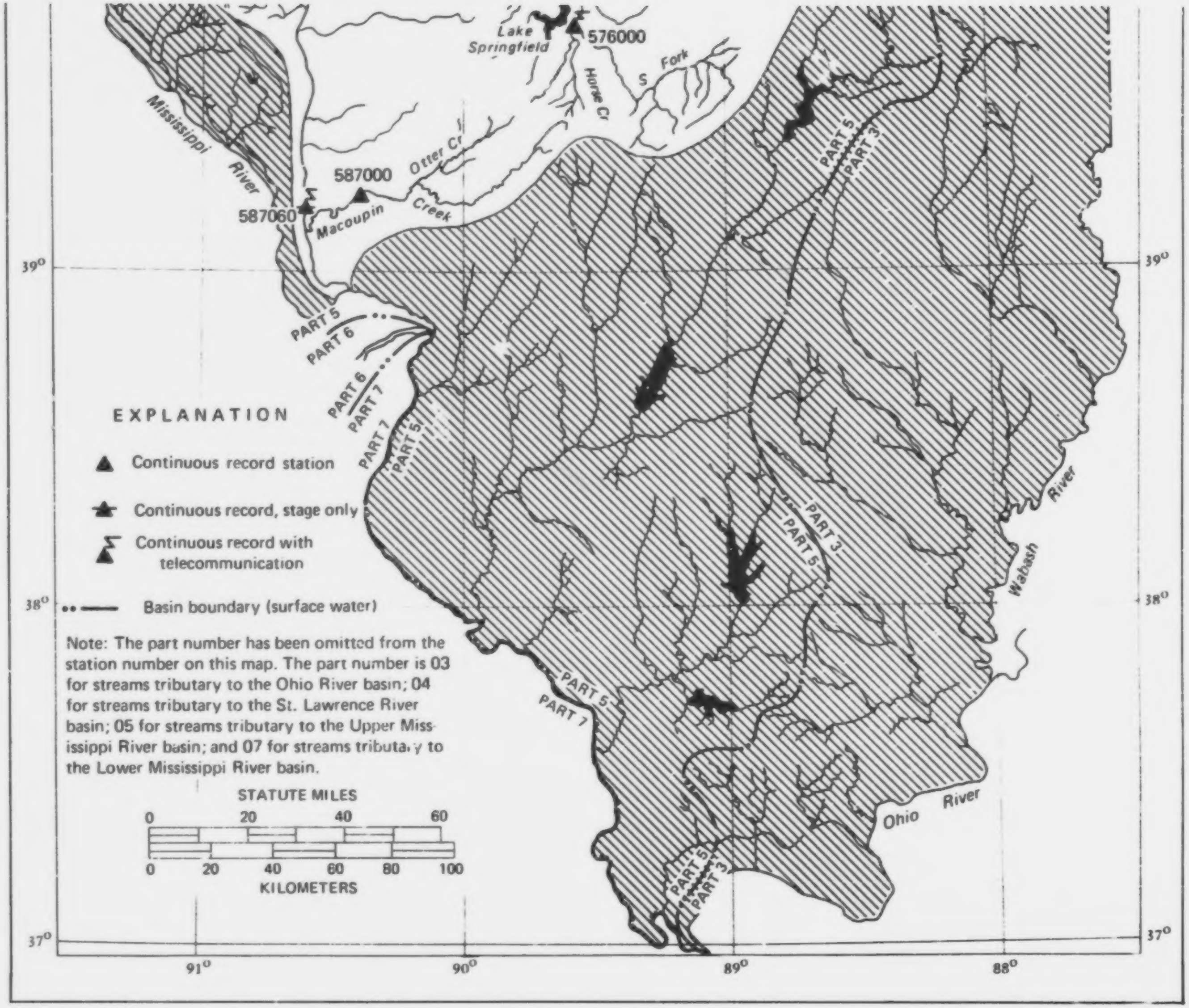
576000
Lake Springfield
Bureau Creek
Fox River
DuPage
Mazon River
Kankakee River
Iroquois
Vermilion River
Panther Cr.
River
Mackinaw
Salt Cr.
Kickapoo Creek
Sangamon
PART 5
PART 3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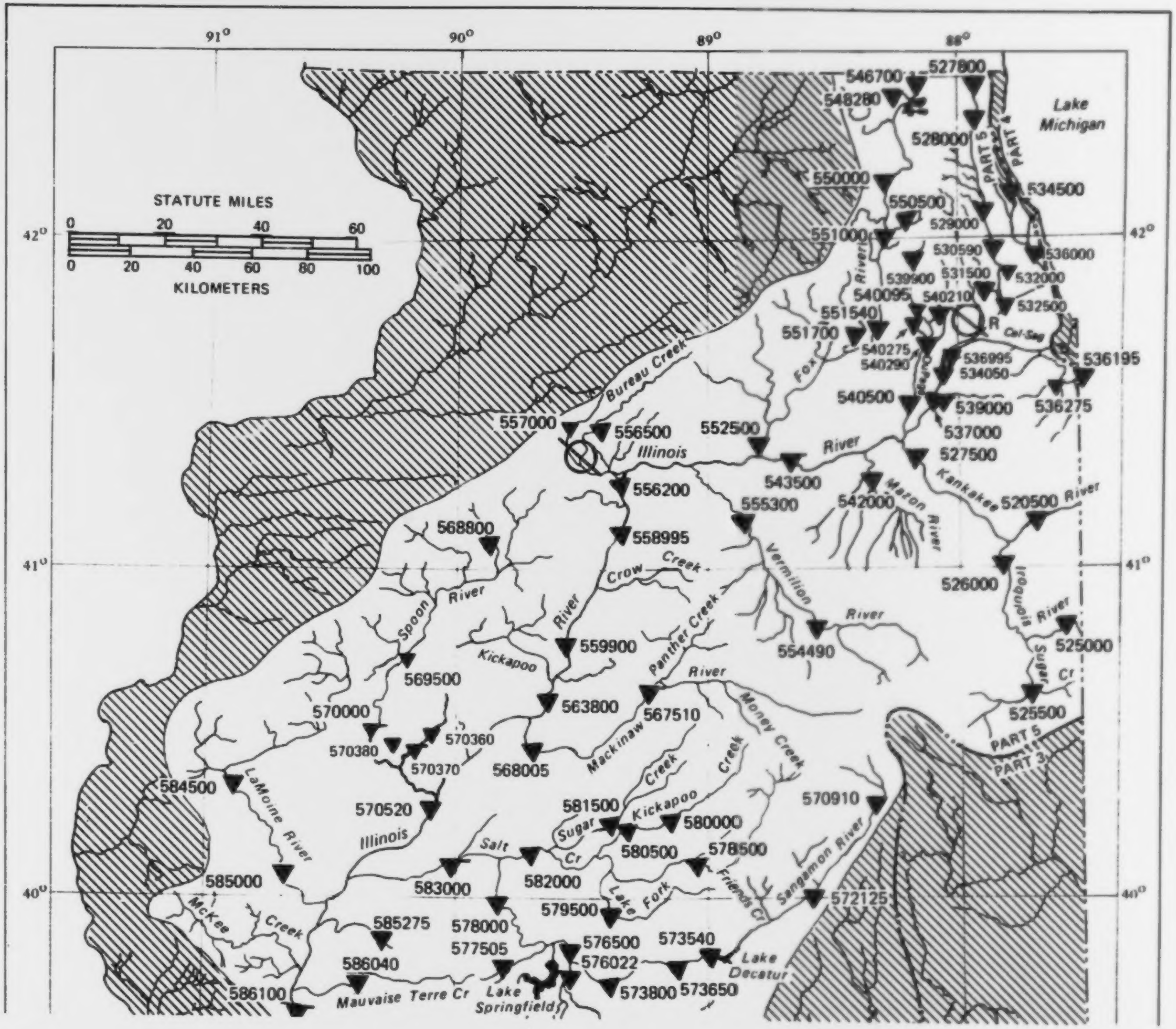
S Fork
Horse Cr
Mississippi River
Otter Cr
587000
587060
Macoupin Creek
PART 5
PART 3
PART 5
PART 6
PART 6
PART 7
PART 7
PART 5
PART 3
PART 5
PART 5
PART 7
PART 5
PART 3
Wabash River
Ohio River
EXPLANATION
▲ Continuous record station
Continuous record, stage only
Continuous record with telecommunication
•• — Basin boundary (surface water)
Note: The part number has been omitted from the station number on this map. The part number is 03 for streams tributary to the Ohio River basin; 04 for streams tributary to the St. Lawrence River basin; 05 for streams tributary to the Upper Mississippi River basin; and 07 for streams tributary to the Lower Mississippi River basin.
STATUTE MILES
0
20
40
60
0
20
40
60
80
100
KILOMETERS
39°
38°
37°
91°
90°
89°
88°

Figure 1. Map of Illinois showing location of active surface water gaging stations in the Illinois River basin


91°
90°
89°
88°
42°
41°
40°
STATUTE MILES
0 20 40 60
0 20 40 60 80 100
KILOMETERS
Lake Michigan
PART 5
PART 4
PART 3
546700
527800
548280
528000
550000
534500
550500
529000
551000
530590
536000
539900
531500
532000
540095
540210
532500
551540
551700
540275
540290
R
Cal-Sag
536995
534050
536195
540500
539000
536275
537000
527500
557000
556500
552500
Bureau Creek
Illinois
River
Fox
River
Des Plaines
543500
542000
Mazon
River
Kankakee
520500
River
556200
555300
558995
568800
Crow Creek
Vermilion
River
526000
Iroquois
River
525000
Sugar
Cr
525500
Spoon River
River
559900
Panther Creek
554490
Kickapoo
569500
River
563800
567510
Mackinaw
Money Creek
570000
570360
570380
570370
568005
584500
LaMoine River
570520
Illinois
581500
Sugar Creek
Kickapoo Creek
580000
570910
Salt
Cr
580500
578500
583000
582000
Sangamon River
Friends Cr
585000
McKee Creek
579500
Lake Fork
572125
578000
585275
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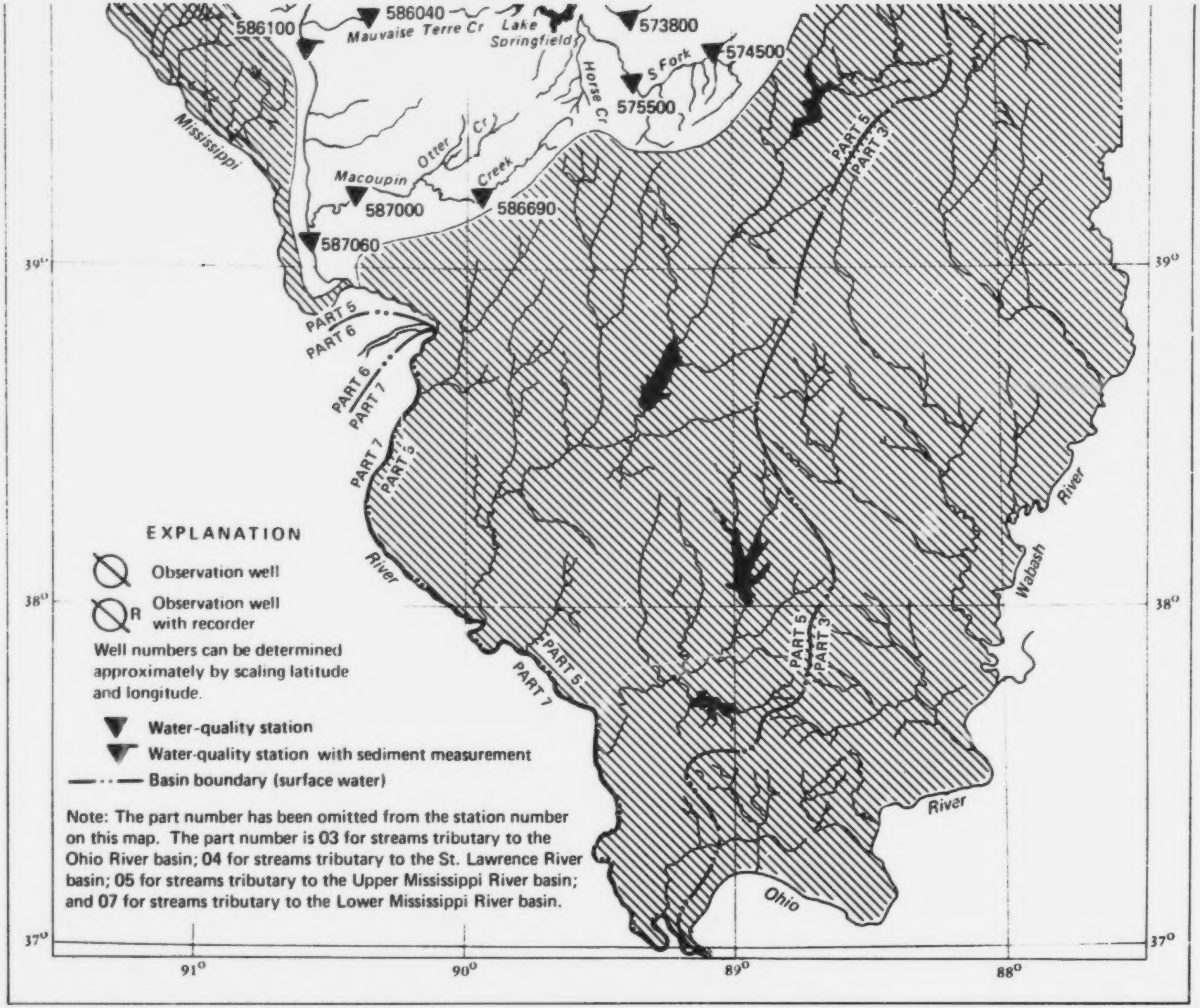
576022
586040
Lake Decatur
586100
Mauvaise Terre Cr
Lake Springfield
573800
573650


586040
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Mauvaise Terre Cr
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574500
Horse Cr
575500
Mississippi
Macoupin
Otter
Cr
Creek
587000
586690
587060
PART 5
PART 3
PART 5
PART 6
PART 6
PART 7
PART 7
PART 5
River
PART 5
PART 7
PART 5
PART 3
Wabash
River
River
Ohio
39°
38°
37°
91°
90°
89°
88°
EXPLANATION
Observation well
R Observation well with recorder
Well numbers can be determined approximately by scaling latitude and longitude.
Water-quality station
Water-quality station with sediment measurement
Basin boundary (surface water)

Note: The part number has been omitted from the station number on this map. The part number is 03 for streams tributary to the Ohio River basin; 04 for streams tributary to the St. Lawrence River basin; 05 for streams tributary to the Upper Mississippi River basin; and 07 for streams tributary to the Lower Mississippi River basin.

Figure 2. Map of Illinois showing location of water-quality stations and observation wells in the Illinois River basin

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City of Springfield, Jim Buckler, Manager, Water Division; L. Frasco, Chief Utility Engineer.

Assistance, by providing funds or services, was given by the U.S. Army Corps of Engineers in collecting records for 48 streamflow-gaging stations and 2 crest-stage gages.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Annual precipitation was below the long-term (1951-80) average for the third consecutive year. The long-term average precipitation in the State ranges from 36 inches in the north to 44 inches in the south. Total precipitation ranged from 73 percent of average in the central to 111 percent in both the east-southeast and the southeast (fig. 3). Monthly precipitation ranged from a low of less than 0.8 inch (45 percent of average) across the northeastern part of the State in January to 8.1 inches (287 percent of average) across the southeastern part in February. Statewide precipitation was above average in November, February, and September, and below average for the remaining months.

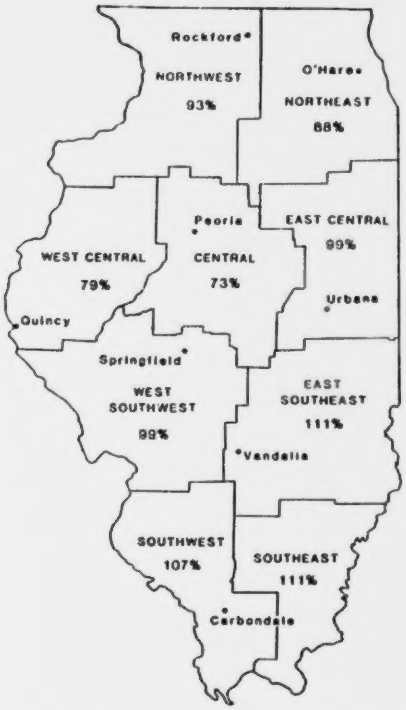

Figure 3.--Percentage of average annual precipitation.

During the 1989 water year, runoff was deficient in the northern and central parts of the State and excessive in the southern part. Runoff at the northern index station--Pecatonica River at Freeport (05435500)--was 67 percent of its median. At the central index station--Sangamon River at Monticello (05572000)--runoff was 69 percent of its median. At the southern index station--Skillet Fork at Wayne City (03380500)--runoff was 135 percent of its median. Figure 4 compares monthly and annual mean discharges (1989 water year) for the three index stations to the 30-year median (1951-80). Runoff at the northern index station was deficient from April through August and normal for the remaining months. At the central index station, runoff was excessive in May and September and deficient in October, February, July and August. Runoff at the southern index station was excessive from February through April and normal for the remaining months.

Surface-Water Quality

The quality of many streams in Illinois has been degraded by numerous point and nonpoint sources, including industrial and municipal discharges, hazardous-waste disposal sites, animal feedlots, highway deicing salts, coal-mine wastes, and agricultural lands. These sources contribute the nutrients, chemicals, and suspended sediment that affect the quality of surface water in the State.

Iron and manganese concentrations also are elevated in most of the State's surface waters. The highest iron and manganese concentrations are found in southern and west-central Illinois, where many streams receive drainage from areas that are being surface mined for coal. Sulfate concentrations and specific conductances

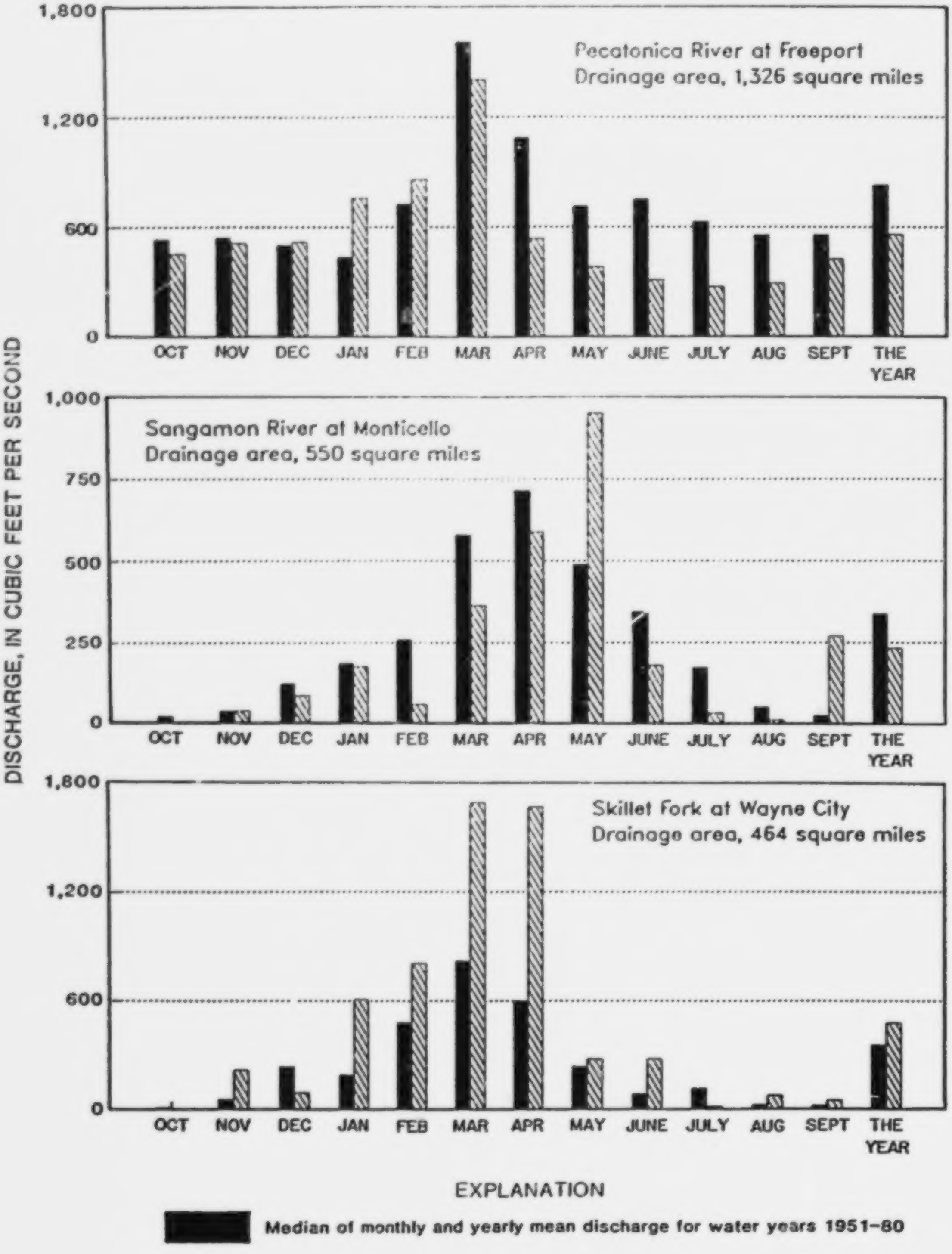

Figure 4.--Discharge during 1989 water year compared with median discharge for water years 1951-80 for three representative gaging stations.

also are higher in these areas. The acidic mine drainage is neutralized by the carbonate rocks and glacial materials through which it flows; near-neutral pH's prevail in most of the State's surface waters that drain mined areas.

Some degree of erosion occurs statewide and affects croplands, streams, lakes, and reservoirs. Erosion during the past 100 years has reduced the amount of topsoil in many parts of Illinois by more than one-third (Illinois State Water Plan Task Force, 1982, p. 19). Of the estimated 181 million tons of soil eroded annually, about 138 million tons (76 percent) is from croplands. Sedimentation has affected aquatic organisms and their habitats, navigability of channels, and quality of water supplies. Reservoir storage throughout the State decreases about 8,000 acre-feet annually as a result of sedimentation (Illinois State Water Plan Task Force, 1982, p. 20).

Table 1 lists suspended-sediment and water-discharge data for the indicated periods of record at various locations in the State.

Table 1.--Average annual suspended-sediment yield and stream runoff

[(T/mi^2)/yr, tons per square mile per year; cfsm, cubic feet per second per square mile]

Station number	Station name	Period of sediment record	Averages for period of sediment record: Yield [(T/mi^2)/yr]	Averages for period of sediment record: Runoff (cfsm)	1989 water year: Yield [(T/mi^2)/yr]	1989 water year: Runoff (cfsm)
05586100	Illinois River at Valley City	February 1980 to present	232	0.97	67.5	0.46
05591200	Kaskaskia River at Cooks Mills	January 1979 to present	78.3	.89	99.8	.73
05594100	Kaskaskia River near Venedy Station	May 1980 to present	150	.94	97.9	.57
05599500	Big Muddy River at Murphysboro	May 1980 to present	134	1.12	197	1.16

SPECIAL NETWORKS

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are to (1) obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, and analysis, (2) report the data so that they and other programs may be used for description of the areal variability of water quality in the Nation's rivers, (3) detect changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Water-Quality Assessment (NAWQA) Program is a program designed to obtain water-quality information that would provide an improved scientific basis for evaluating the effectiveness of water-quality management programs and for predicting the likely effects of contemplated changes on land and water-management practices. The goals of the NAWQA program are to (1) provide a nationally consistent description of current water-quality conditions, (2) define long-term trends in water quality, and (3) identify, describe, and explain, as possible, the major factors that affect observed conditions and trends in water quality.

In fiscal year 1986, the U.S. Geological Survey began a National Water-Quality Assessment Pilot Program to test and refine assessment concepts and approaches, and to evaluate the potential use and cost of a fully implemented program. Four surface-water and three ground-water pilot projects were selected to test and refine the assessment concepts. One of the pilot project study areas selected was the upper Illinois River basin in Illinois, Indiana, and Wisconsin.

The four major work elements of the upper Illinois River basin study are (1) an analysis of existing information, (2) fixed-station sampling, (3) synoptic sampling, and (4) intensive reach studies. Presently, the analysis of existing information is still in progress. Fixed-station sampling began in April 1987 and will continue to operate until September 1990. The fixed-station sampling program is operated in cooperation with the Illinois Environmental Protection Agency. The fixed-station sampling program consists of eight stations that are sampled on a monthly basis (table 2). Synoptic sampling has been conducted for trace metals in bottom material and for dissolved oxygen, bacteria, nutrients, and trace organic compounds in water. To date, no intensive reach studies have been conducted.

Table 2.--Fixed-station sampling sites used in the upper Illinois River basin pilot National Water-Quality Assessment project

Station number	Station name
05520500	Kankakee River at Momence, Ill.
05526000	Iroquois River near Chebanse, Ill.
05532500	Des Plaines River at Riverside, Ill.
05536995	Chicago Sanitary and Ship Canal at Romeoville, Ill.
05540500	Du Page River at Shorewood, Ill.
05543500	Illinois River at Marseilles, Ill.
05550000	Fox River at Algonquin, Ill.
05552500	Fox River at Dayton, Ill.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1989 water year that began October 1, 1988, and ended September 30, 1989. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface water, and ground-water-level data. The locations of stations and wells where the data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report, whether stream site or well, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 05527500, which appears just to the left of the station name, includes the two-digit Part number "05" plus the six-digit downstream-order number "527500." The Part number designates the major river basin; for example, part "05" is the Upper Mississippi River basin.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude is found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig. 5).

Records of Stage and Water Discharge

Records of stage and water discharge may be completed or partial. Complete records of discharge are those obtained by using discrete measurements and a continuous stage-recording device. Data from these may be used to compute either instantaneous or mean daily discharges for any instant or period of time within the period of record. Similarly, complete records of lake or reservoir content are those for which stage or content may be

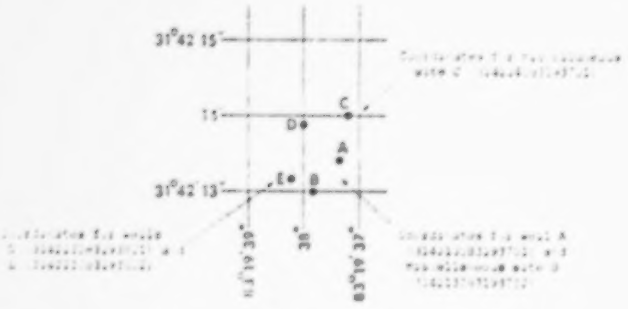

Figure 5.--System for numbering wells (latitude and longitude).

computed or estimated with reasonable accuracy for any instant or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges or end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements, without the use of a continuous stage-recording device, and pertain to only one or a few flow characteristics. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but are presented separately in this report. Locations of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with digital recorders that punch stage values on paper tapes at selected time intervals or with analog recorders that trace continuous graphs of stage. Measurements of discharge are made with current meters and acoustical flowmeters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements or peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables that define the relationship of stage and content. The application of stage to stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Computations may become increasingly in error as time since the last survey elapses. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when a recorder stops or otherwise malfunctions, when intakes become plugged, when a float freezes in a well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. Under its various headings, the manuscript provides descriptive information on station location, period of record, average discharge, historical extremes, record accuracy, and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. The following describe information presented under the corresponding headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council, and are published in "River Mileages and Drainage Areas for Illinois Streams."

DRAINAGE AREA.--Drainage areas are determined using the most accurate maps available. Because the types of maps available vary from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent to records from the present station.

REVISED RECORDS.--Occasionally, because of new information, published records are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record for water-discharge stations will either be identified by date in this paragraph or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a digital or graphic recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages that occurred during the water year and were greater than a selected base discharge are presented under this heading. Peaks greater than the base discharge, excluding the highest, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, revision of the record for a discontinued gaging station may be needed. For these stations, there would be no station manuscript published, and therefore, no "Revised Records" entry to document the revision. Users of date for these stations may wish to contact the District office to determine if the published records have been revised since the station was discontinued. If the data were obtained by computer retrieval, the data would be current; published revisions are always preceded by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations, monthly and (or) yearly observed discharges are either adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Tables of data collected at partial-record stations follow those for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules also apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations may not reflect natural runoff because of the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Records of daily diversion of water from Lake Michigan are collected by the Illinois Department of Transportation, Division of Water Resources. The records of daily diversion of water from Lake Michigan may be obtained from the Illinois Department of Transportation, Division of Water Resources, 310 S. Michigan Avenue, Room 1606, Chicago, IL 60604 (telephone number 312-793-3123).

Records of discharge, not published by the Geological Survey, are collected at several sites in Illinois by the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Illinois District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

In March 1989, the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a nationwide median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias. Analyses done at the National Water-Quality Laboratory have a value of 80020 for parameter code 00028 (analyzing agency).

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in a river basin. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 2.

Arrangement of Records

Water-quality records collected at a surface-water, daily-record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water, daily-record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the ambient quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on-site when the samples are taken. To assure that measurements made in the laboratory represent field conditions, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on p. 23 and 24 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of constituents throughout the stream cross section is homogeneous. However, the concentrations of constituents at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors that must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the USGS District office whose address is given on the back of the title page of this report.

Water Temperatures

Water temperatures are measured at all of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. Large streams have small diel temperature changes; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to compute the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharges for other periods of similar water discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Denver, Colo., or the Illinois Environmental Protection Agency's laboratories in Champaign and Chicago, Ill. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; and Book 5, Chap. A1, A3, and A4. The following codes identify the agency or office having the principal responsibility for collecting and/or analyzing water samples.

Agency	Agency Code
U.S. Geological Survey (general)	1028
Illinois Environmental Protection Agency	17002
Illinois State Water Survey	17003
U.S. Geological Survey, Denver Laboratory	80020
U.S. Geological Survey, Illinois District	81700

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily, are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature recorder, pumping sediment sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)

Records of Ground-Water Levels

Data Collection and Computation

Measurements of water levels are made under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric identifier, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. The method and frequency of measurement is given in the station description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) to which the well is open.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels for the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. Daily maximum water levels are reported for wells equipped with a recording device. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. A table for converting inch-pound units to the International System of Units (SI) is on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C ± 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C ± 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, coccal bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C ± 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue of zooplankton and periphyton present after drying in an oven at 105 °C until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meter per second.

Cubic foot per second-day (cfs-day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, bicarbonate is converted to carbon dioxide, water, and carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the conversion.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions with those observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of solvent. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of solvent. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are to (1) obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, and analysis, (2) report the data so that they and other programs may be used for description of the areal variability of water quality in the Nation's rivers, (3) detect changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a five-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are, for the the most part, the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classifications used in this report agree with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation
Silt..........	.004 - .062	Sedimentation
Sand..........	.062 - 2.0	Sedimentation or sieve
Gravel........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2 \cdot time)$] for periphyton and macrophytes and [mg $C/(m^3 \cdot time)$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O_2/(m^2 \cdot time)$] for periphyton and macrophytes and [mg $O_2/(m^3 \cdot time)$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrologic event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q_{10}) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in a solvent.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific conductance is related to the type and concentration of ions in solution and can be used as an indicator of the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time (discharge), flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton.

Surface area of a lake is that area, in acres, outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter. In localities not covered by topographic maps, the areas are computed from the best maps available. All areas shown are those corresponding to the stage existing at the time when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-μm filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-μm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble sustances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total recoverable* concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-μm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total* concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insects
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1989, is called the "1989 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

REFERENCES CITED

Illinois State Water Plan Task Force, 1982, Illinois State Water Plan, 1982 progress report: Champaign, 117 p.

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-D2. Application of seismic-refraction techniques to hydrologic studies, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

2-F1. Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. Measurement of time of travel in streams by dye tracing, by F. A. Kilpatrick and J. R. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.

3-A10. Discharge rating at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.

3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-A16. Measurement of discharge using tracers, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.

3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.

3-A18. Determination of stream reaeration coefficients by use of tracers, by F. A. Kilpatrick, R. E. Rathbun, N. Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. Introduction to ground-water hydraulics, a programmed text for self instructions, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.

3-B6. The principle of superposition and its application in ground-water hydraulics, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.

5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. Methods for the determination of organic substances in water and fluvial sediments, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.

5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.

5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

6-A1. A modular three-dimensional finite-difference ground-water flow model, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.

7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. A model for simulation of flow in singular and interconnected channels, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-A2. Installation and service manual for U.S. Geological Survey manometers, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

SURFACE-WATER RECORDS

REMARKS CODES.--The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)

HYDROLOGIC-DATA STATION RECORDS

UPPER MISSISSIPPI RIVER BASIN

ILLINOIS RIVER BASIN

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in SW1/4NE1/4 sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at Hill Street in Momence, 0.2 mi downstream from bridge on State Highways 1 and 17, 1.2 mi upstream from Tower Creek, and at mile 47.9.

DRAINAGE AREA.--2,294 mi^2, of which 201 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to December 1905; February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi upstream at datum 1.00 ft higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--74 years (water years 1916-89), 1,988 ft^3/s, 11.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, Mar. 6, 1979, gage height, 10.51 ft, ice jam; minimum, 243 ft^3/s, Aug. 7, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,080 ft^3/s, June 3, gage height, 5.25 ft; maximum gage height, 6.00 ft, Feb. 20, ice jam; minimum daily discharge, 524 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	524	1050	2830	3440	2660	e1500	2760	1650	5500	1420	1250	1400
2	589	1000	2720	3300	2590	e1450	2810	1630	7630	1360	1200	2000
3	591	969	2630	3130	2540	e1550	3410	1630	7830	1320	1140	1950
4	600	1040	2540	2930	2470	e1800	4120	1560	7960	1250	1080	1900
5	623	1070	2460	2810	2410	e2300	4080	1500	7470	1180	1010	1750
6	615	1100	2370	2870	e2300	2180	4050	1510	6900	1100	945	1610
7	599	1110	2290	3210	e2200	2180	4090	1490	6350	1020	890	1680
8	621	1110	2210	4340	e2200	2240	4150	1460	5900	940	877	1960
9	645	1200	2130	4160	e2150	2170	4190	1450	5550	891	866	3480
10	632	1490	2040	4030	e2150	2170	4190	1400	5270	832	827	4010
11	590	1720	1940	3930	e2200	2320	4110	1350	5050	784	809	3960
12	554	1950	1970	3880	e2500	2360	3930	1340	4950	855	776	3720
13	537	2230	1850	3830	e3200	2300	3650	1290	4910	914	705	3370
14	557	2490	1810	3770	e3500	2260	3310	1250	4660	918	708	3070
15	592	2660	1750	3660	e3700	2240	2970	1230	4370	851	773	2950
16	717	2890	1700	3510	e3000	2190	2710	1190	4100	784	803	2790
17	733	3030	1770	3360	e2400	2160	2530	1170	3820	763	809	2580
18	781	3060	1820	3210	e2100	2300	2400	1150	3500	722	784	2410
19	880	3130	1810	3070	e2000	2420	2320	1340	3170	766	726	2180
20	1080	3260	1680	2970	e2100	2460	2250	1710	2770	917	670	1990
21	1290	3460	1630	2880	e1950	2540	2180	1630	2540	1180	654	1750
22	1400	3420	1730	2820	e1800	2600	2110	1580	2340	1500	670	1640
23	1470	3430	2150	2760	e1700	2590	2030	1550	2220	1760	707	1530
24	1420	3460	2470	2690	e1600	2540	1950	1450	2090	1740	717	1450
25	1370	3440	2610	2630	e1600	2470	1880	1510	1930	1620	736	1370
26	1370	3410	2710	2660	e1600	2390	1830	1770	1740	1470	737	1340
27	1360	3350	2980	2700	e1600	2310	1760	1850	1620	1300	742	1290
28	1310	3240	3390	2690	e1550	2330	1740	1880	1610	1180	757	1220
29	1230	3110	3580	2680	---	3280	1730	2730	1540	1170	741	1180
30	1180	2960	3800	2690	---	3130	1690	4320	1490	1210	745	1150
31	1120	---	3730	2690	---	2890	---	4230	---	1230	803	---
TOTAL	27580	70839	73100	99300	63770	71620	86930	52800	126780	34947	25657	64680
MEAN	890	2361	2358	3203	2277	2310	2898	1703	4226	1127	828	2156
MAX	1470	3460	3800	4340	3700	3280	4190	4320	7960	1760	1250	4010
MIN	524	969	1630	2630	1550	1450	1690	1150	1490	722	654	1150
CFSM	.39	1.03	1.03	1.40	.99	1.01	1.26	.74	1.84	.49	.36	.94
IN.	.45	1.15	1.19	1.61	1.03	1.16	1.41	.86	2.06	.57	.42	1.05

CAL YR 1988 TOTAL 702510 MEAN 1919 MAX 6180 MIN 248 CFSM .84 IN. 11.39
WTR YR 1989 TOTAL 798003 MEAN 2186 MAX 7960 MIN 524 CFSM .95 IN. 12.94

e Estimated

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year. Additional chemical data for water years 1959-72 are published in Water-Resources Investigations 78-23 and 79-24 as site F 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC- ITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)
OCT											
13...	1115	81700	17002	13	410	--	1.07	529	691	8.20	10.0
13...	1116	81700	80020	13	410	--	1.07	529	659	8.58	10.0
NOV											
09...	1130	81700	17002	9	380	E1.50	1.64	1130	678	7.90	7.0
09...	1131	81700	80020	9	380	E1.50	1.64	1130	616	8.04	7.0
09...	1145	17002	17002	--	--	--	--	--	671	7.40	4.0
DEC											
08...	1200	81700	17002	11	515	E3.50	2.39	2200	680	9.20	0.5
08...	1201	81700	80020	11	515	E3.50	2.39	2200	685	8.23	0.5
JAN											
13...	0845	81700	17002	10	526	E1.50	3.30	3840	572	8.90	3.5
13...	0846	81700	80020	10	526	E1.50	3.30	3840	577	8.87	3.5
FEB											
09...	0830	81700	17002	7	530	E0.75	3.09	E2150	715	7.20	-16.5
09...	0831	81700	80020	7	530	E0.75	3.09	E2150	730	8.22	-16.5
MAR											
10...	0845	81700	17002	10	530	E1.75	2.36	2150	626	8.00	3.0
10...	0846	81700	80020	10	530	E1.75	2.36	2150	663	7.82	3.0
APR											
03...	1515	81700	17002	10	515	E3.50	3.02	3550	594	8.20	10.0
03...	1516	81700	80020	10	515	E3.50	3.02	3550	603	8.31	10.0
12...	1100	17002	17002	--	--	--	--	--	629	7.90	9.0
MAY											
08...	1000	81700	17002	9	400	E2.50	2.06	1460	702	8.20	19.0
08...	1001	81700	80020	9	400	E2.50	2.06	1460	680	8.70	19.0
30...	1230	81700	17002	10	515	E3.00	3.40	4030	482	7.50	--
30...	1231	81700	80020	10	515	E3.00	3.40	4030	466	7.75	--
JUN											
08...	0930	81700	17002	10	520	E4.50	4.26	5960	593	7.20	28.0
08...	0931	81700	80020	10	520	E4.50	4.26	5960	561	7.65	28.0
JUL											
13...	0815	81700	17002	9	390	E2.00	1.66	906	663	7.90	23.5
13...	0816	81700	80020	9	390	E2.00	1.66	906	658	8.02	23.5
30...	1245	81700	80020	9	400	--	1.81	1210	606	8.05	28.0
AUG											
10...	1130	81700	17002	10	396	E2.00	1.47	820	741	7.90	27.0
10...	1131	81700	80020	10	396	E2.00	1.47	820	724	8.33	27.0
SEP											
01...	1100	81700	17002	10	420	E2.00	1.83	1240	663	7.90	27.5
01...	1101	81700	80020	10	420	E2.00	1.83	1240	633	8.13	27.5

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT											
13...	10.5	2.5	12.2	15	20	--	360	140	<1.0	96	94
13...	--	--	--	--	--	--	--	--	0	--	--
NOV											
09...	7.0	4.3	10.5	19	--	--	350	140	14	97	94
09...	--	--	--	--	--	--	--	--	14	--	--
09...	6.5	5.2	11.7	17	90	--	360	150	--	97	96
DEC											
08...	3.0	2.8	10.8	13	--	--	360	150	2.0	99	98
08...	--	--	--	--	K57	45	--	--	2.0	--	--
JAN											
13...	0.0	6.0	12.0	20	<10	--	290	130	0	83	79
13...	--	--	--	--	--	330	--	--	0	--	--
FEB											
09...	0.5	3.4	10.0	12	<10	--	370	150	12	100	100
09...	--	--	--	--	--	K25	--	--	12	--	--
MAR											
10...	3.5	3.0	11.9	14	<10	--	350	--	5.0	95	--
10...	--	--	--	--	--	44	--	--	5.0	--	--
APR											
03...	8.0	92	10.3	38	--	--	290	130	0	80	78
03...	--	--	--	--	630	588	--	--	0	--	--
12...	7.0	5.1	11.8	17	300	--	330	140	--	92	90
MAY											
08...	13.0	4.4	10.6	15	310	--	340	130	<1.0	91	90
08...	--	--	--	--	--	K24	--	--	0	--	--
30...	18.5	230	6.4	52	--	--	200	95	10	52	57
30...	--	--	--	--	10000	--	--	--	10	--	--
JUN											
08...	20.5	13	5.8	29	170	--	270	130	10	76	75
08...	--	--	--	--	--	277	--	--	10	--	--
JUL											
13...	24.0	4.3	6.6	26	500	--	330	130	10	91	89
13...	--	--	--	--	--	--	--	--	10	--	--
30...	--	--	--	--	--	--	--	--	1.0	--	--
AUG											
10...	22.5	2.4	9.0	18	--	--	340	120	<1.0	91	90
10...	--	--	--	--	79	120	--	--	0	--	--
SEP											
01...	21.5	6.2	8.1	23	--	--	310	130	2.0	87	80
01...	--	--	--	--	>8000	>8000	--	--	2.0	--	--

ILLINOIS RIVER BASIN

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY LAB (MG/L AS CACO3) (90410)
OCT											
13...	31	31	15	15	2.3	2.2	--	--	--	--	219
13...	--	--	--	--	--	--	60	146	220	220	--
NOV											
09...	30	29	14	13	2.3	2.3	--	--	--	--	215
09...	--	--	--	--	--	--	0	257	210	211	--
09...	29	29	13	13	2.2	2.2	--	--	--	--	214
DEC											
08...	29	28	15	15	2.3	2.2	--	--	--	--	213
08...	--	--	--	--	--	--	0	255	210	209	--
JAN											
13...	24	23	9.1	9.0	2.0	1.9	--	--	--	--	158
13...	--	--	--	--	--	--	0	194	160	159	--
FEB											
09...	30	30	14	14	1.8	1.7	--	--	220	--	222
09...	--	--	--	--	--	--	0	271	220	222	--
MAR											
10...	28	29	9.5	10	1.9	1.9	--	--	--	--	191
10...	--	--	--	--	--	--	0	233	190	191	--
APR											
03...	25	24	12	12	2.3	1.7	--	--	--	--	163
03...	--	--	--	--	--	--	0	199	160	163	--
12...	26	25	9.0	9.0	2.4	2.3	--	--	--	--	188
MAY											
08...	27	27	17	17	2.7	2.3	--	--	--	--	202
08...	--	--	--	--	--	--	0	246	200	202	--
30...	19	15	11	11	4.6	3.0	--	--	--	--	110
30...	--	--	--	--	--	--	0	134	110	110	--
JUN											
08...	22	21	7.4	7.4	3.5	3.3	--	--	--	--	148
08...	--	--	--	--	--	--	0	181	150	148	--
JUL											
13...	27	26	11	11	2.4	1.9	--	--	--	--	199
13...	--	--	--	--	--	--	0	237	200	194	--
30...	--	--	--	--	--	--	0	221	180	181	--
AUG											
10...	27	27	20	21	3.4	3.6	--	--	--	--	214
10...	--	--	--	--	--	--	0	260	210	213	--
SEP											
01...	28	26	20	20	1.7	--	--	--	--	--	178
01...	--	--	--	--	--	--	0	218	180	179	--

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE (MG/L AS SO4) (00946)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
13...	120	120	24	0.1	<0.10	--	461	423	4	3	--
13...	--	--	--	--	--	--	--	--	--	--	<0.010
NOV											
09...	--	130	23	<0.1	--	--	423	424	7	2	--
09...	--	--	--	--	--	0.021	--	--	--	--	0.021
09...	--	130	22	0.1	--	--	--	424	6	2	--
DEC											
08...	--	150	24	0.1	--	--	410	455	6	2	--
08...	--	--	--	--	--	--	--	--	--	--	0.020
JAN											
13...	--	120	23	<0.1	--	--	--	372	10	4	--
13...	--	--	--	--	--	--	--	--	--	--	0.030
FEB											
09...	--	140	28	0.1	--	--	491	461	2	1	--
09...	--	--	--	--	--	<0.010	--	--	--	--	<0.010
MAR											
10...	--	130	26	0.1	--	--	449	--	10	2	--
10...	--	--	--	--	--	--	--	--	--	--	0.020
APR											
03...	--	100	25	0.2	--	--	420	360	119	15	--
03...	--	--	--	--	--	--	--	--	--	--	0.030
12...	--	110	23	0.1	--	--	--	372	8	3	--
MAY											
08...	130	140	24	0.1	<0.10	--	437	423	11	3	--
08...	--	--	--	--	--	0.010	--	--	--	--	0.010
30...	76	79	19	0.2	0.19	--	312	272	388	42	--
30...	--	--	--	--	--	--	--	--	--	--	0.070
JUN											
08...	92	94	17	0.2	0.16	--	377	326	27	6	--
08...	--	--	--	--	--	--	--	--	--	--	0.130
JUL											
13...	120	120	23	0.1	0.13	--	401	399	51	10	--
13...	--	--	--	--	--	--	--	--	--	--	0.020
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	140	140	26	0.1	0.10	--	442	442	85	19	--
10...	--	--	--	--	--	0.020	--	--	--	--	<0.010
SEP											
01...	140	140	24	0.1	0.11	--	456	398	77	15	--
01...	--	--	--	--	--	--	--	--	--	--	0.030

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	AMMONIA UNIONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)
OCT											
13...	0.760	0.740	<0.100	<0.100	<0.003	--	0.20	--	0.030	0.010	--
13...	--	0.800	--	0.010	--	0.29	0.40	0.30	0.040	0.020	0.050
NOV											
09...	1.10	1.10	<0.100	<0.100	<0.001	--	0.50	--	0.040	0.020	--
09...	--	1.00	--	0.041	--	0.46	0.70	0.50	0.041	0.021	0.010
09...	1.20	--	<0.100	--	<0.001	--	0.50	--	0.050	0.020	--
DEC											
08...	1.80	1.80	<0.100	0.100	<0.015	--	0.50	--	0.040	0.010	--
08...	--	1.90	--	0.070	--	--	0.70	<0.20	0.040	0.020	0.010
JAN											
13...	4.60	4.50	0.130	0.080	0.009	--	1.0	--	0.070	0.030	--
13...	--	4.40	--	0.090	--	0.51	0.80	0.60	0.050	0.020	0.020
FEB											
09...	2.00	2.00	0.110	<0.100	--	--	0.60	--	0.030	0.020	--
09...	--	1.60	--	0.110	--	0.29	0.50	0.40	0.030	0.010	0.030
MAR											
10...	2.50	2.50	<0.100	<0.100	<0.001	--	0.80	--	0.040	<0.010	--
10...	--	2.10	--	0.070	--	0.53	1.2	0.60	0.040	0.010	0.010
APR											
03...	4.50	4.40	0.090	0.080	0.002	--	1.4	--	0.200	0.020	--
03...	--	4.20	--	0.080	--	0.82	1.4	0.90	0.190	0.020	0.020
12...	2.40	--	0.240	--	0.003	--	0.80	--	0.050	<0.010	--
MAY											
08...	0.910	0.890	0.160	0.110	0.006	--	1.3	--	0.066	0.010	--
08...	--	1.00	--	0.030	--	0.37	0.40	0.40	0.040	0.010	0.010
30...	4.80	4.80	0.320	0.180	0.004	--	3.0	--	0.390	0.050	--
30...	--	4.70	--	0.140	--	0.76	1.0	0.90	0.120	0.050	0.040
JUN											
08...	4.10	4.10	0.160	0.120	0.001	--	1.4	--	0.080	0.030	--
08...	--	4.30	--	0.080	--	0.92	1.0	1.0	0.050	0.030	0.030
JUL											
13...	1.50	1.50	0.150	<0.100	0.006	--	1.4	--	0.114	0.020	--
13...	--	1.60	--	0.040	--	0.56	1.0	0.60	0.050	0.040	0.040
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	0.660	0.690	<0.100	<0.100	<0.004	--	0.60	--	0.084	0.020	--
10...	--	0.710	--	0.020	--	0.58	0.80	0.60	0.070	0.050	0.030
SEP											
01...	0.860	0.890	<0.100	<0.100	<0.004	--	0.60	--	0.140	0.030	--
01...	--	0.890	--	0.080	--	0.42	1.0	0.50	0.150	0.050	0.050

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
13...	70	<50	--	1	1	40	41	<0.5	<0.5	<50	50
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	170	90	--	2	1	50	44	<0.5	<0.5	<50	<50
09...	--	--	<1	--	--	--	--	--	--	--	--
09...	170	<50	--	2	--	50	49	<0.5	<0.5	50	50
DEC											
08...	60	<50	--	1	1	50	50	<0.5	<0.5	70	70
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	370	70	--	1	<1	60	46	<0.5	<0.5	<50	<50
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	<50	<50	--	<1	<1	30	28	<0.5	<0.5	50	60
09...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
10...	200	90	--	1	<1	40	40	<0.5	<0.5	<50	<50
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	4100	140	--	2	<1	70	42	<0.5	<0.5	<50	<50
03...	--	--	--	--	--	--	--	--	--	--	--
12...	300	190	--	1	--	50	48	<0.5	<0.5	<50	<50
MAY											
08...	420	90	--	2	2	50	45	<0.5	<0.5	70	70
08...	--	--	<1	--	--	--	--	--	--	--	--
30...	11000	400	--	6	1	100	40	<0.5	<0.5	60	60
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	2100	1200	--	2	1	70	58	<0.5	<0.5	<50	<50
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	880	80	--	3	1	60	48	<0.5	<0.5	<50	<50
13...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	480	110	--	2	1	50	47	<0.5	<0.5	80	80
10...	--	--	<1	--	--	--	--	--	--	--	--
SEP											
01...	790	60	--	3	1	60	39	<0.5	<0.5	80	80
01...	--	--	--	--	--	--	--	--	--	--	--

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
OCT											
13...	<0.1	<0.1	67	20	<5	<5	<5	11	480	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	0.18	<0.1	<5	<5	<5	<5	<5	<5	850	<50	<5
09...	--	--	--	--	--	--	--	--	--	--	--
09...	<3	<3	<5	<5	<5	<5	<5	<5	870	97	<5
DEC											
08...	1.7	<0.1	<5	<5	<5	<5	<5	<5	630	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<0.1	<0.1	6	5	<5	<5	<5	<5	900	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	0.1	0.5	<5	<5	<5	<5	<5	<5	530	<50	<5
09...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	0.1	<0.1	<5	<5	<5	<5	<5	<5	810	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	0.2	<0.1	9	6	<5	<5	7	<5	5200	<50	<5
03...	--	--	--	--	--	--	--	--	--	--	--
12...	<3	<3	<5	<5	<5	<5	<5	<5	740	88	<5
MAY											
08...	<0.1	<0.1	6	5	<5	<5	<5	<5	1400	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
30...	0.5	<0.1	6	<5	7	<5	13	<5	14000	<50	21
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	<0.1	<0.1	8	8	<5	<5	8	5	1700	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	0.1	<0.1	15	<5	<5	<5	<5	<5	2900	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	<0.1	0.1	7	5	<5	<5	<5	<5	1600	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	0.1	0.1	<5	<5	<5	<5	<5	<5	2900	<50	<5
01...	--	--	--	--	--	--	--	--	--	--	--

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT											
13...	<5	55	19	--	--	--	8	10	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	<5	100	30	--	--	--	<5	<5	<1	<3	<3.0
09...	--	--	--	--	--	4	--	--	--	--	--
09...	<5	120	36	<0.05	--	--	<5	<5	--	<3	<3.0
DEC											
08...	<5	110	53	--	--	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<5	130	52	--	--	--	<5	<5	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	<5	110	83	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
09...	--	--	--	--	--	5	--	--	--	--	--
MAR											
10...	<5	120	67	--	--	--	6	<5	<1	<3	<3.0
10...	--	--	--	E0.05	E0.05	--	--	--	--	--	--
APR											
03...	<5	160	36	<0.05	<0.05	--	10	<5	<1	<3	<3.0
03...	--	--	--	--	--	--	--	--	--	--	--
12...	<5	110	33	<0.05	--	--	<5	<5	--	<3	<3.0
MAY											
08...	<5	140	35	--	--	--	12	12	<1	<3	<3.0
08...	--	--	--	--	--	4	--	--	--	--	--
30...	<5	500	49	<0.05	<0.05	--	13	<5	<1	<3	<3.0
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	<5	140	51	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	<5	300	36	--	--	--	<5	<5	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	<5	180	32	--	--	--	11	6	<1	<3	<3.0
10...	--	--	--	--	--	4	--	--	--	--	--
SEP											
01...	<5	280	33	--	--	--	<10	<10	<1	<3	<3.0
01...	--	--	--	--	--	--	--	--	--	--	--

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
13...	140	--	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	140	130	<5	<5	<50	<50	--	--	--	--	--
09...	--	--	--	--	--	--	1.9	<0.4	4.2	0.4	3.2
09...	130	130	<5	<5	<50	<50	--	--	--	--	--
DEC											
08...	150	150	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	130	130	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	170	160	<5	<5	<50	<50	--	--	--	--	--
09...	--	--	--	--	--	--	2.5	0.4	4.2	0.4	3.0
MAR											
10...	130	--	<5	<5	<100	<100	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	130	120	6	<5	<50	<50	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
12...	140	140	<5	<5	<50	<50	--	--	--	--	--
MAY											
08...	130	130	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	1.6	0.8	3.0	1.0	2.4
30...	110	100	17	<5	<100	<100	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	120	110	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	140	130	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	140	140	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	140	130	<5	<5	<100	<100	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
13...	--	5.4	--	--	<0.005	<0.005	<5	--	--	--	--
13...	--	--	3.8	0.3	--	--	--	--	9	13	94
NOV											
09...	--	7.1	--	--	<0.005	<0.005	<5	1	--	--	--
09...	0.4	--	3.9	0.3	--	--	--	--	35	107	96
09...	--	7.5	--	--	--	<0.005	<5	1	--	--	--
DEC											
08...	--	7.7	--	--	<0.005	<0.005	<5	<1	--	--	--
08...	--	--	0.5	0.4	--	--	--	--	37	220	96
JAN											
13...	--	9.5	--	--	<0.005	<0.005	<5	16	--	--	--
13...	--	--	6.9	0.7	--	--	--	--	26	270	68
FEB											
09...	--	6.2	--	--	<0.005	<0.005	<5	1	--	--	--
09...	0.4	--	4.6	0.2	--	--	--	--	169	0.0	99
MAR											
10...	--	6.0	--	--	<0.005	<0.005	<5	<1	--	--	--
10...	--	--	4.4	0.4	--	--	--	--	28	163	85
APR											
03...	--	8.5	--	--	--	<0.005	3	6	--	--	--
03...	--	--	6.3	2.5	--	--	--	--	135	1290	99
12...	--	8.5	--	--	--	<0.005	<5	1	--	--	--
MAY											
08...	--	6.0	--	--	<0.005	<0.005	<5	<1	--	--	--
08...	0.8	--	4.5	0.7	--	--	--	--	24	95	89
30...	--	14	--	--	<0.005	<0.005	10	1	--	--	--
30...	--	--	5.3	>5.0	--	--	--	--	513	5580	98
JUN											
08...	--	11	--	--	<0.005	0.005	<5	1	--	--	--
08...	--	--	8.7	--	--	--	--	--	51	821	86
JUL											
13...	--	7.5	--	--	<0.005	0.005	<5	<1	--	--	--
13...	--	--	5.6	3.0	--	--	--	--	56	137	100
30...	--	--	5.4	2.3	--	--	--	--	55	180	98
AUG											
10...	--	6.1	--	--	<0.005	<0.005	15	<1	--	--	--
10...	--	--	4.8	1.8	--	--	--	--	30	66	98
SEP											
01...	--	6.5	--	--	<0.005	<0.005	<5	<1	--	--	--
01...	--	--	4.8	3.5	--	--	--	--	63	211	98

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
13...	1132	81700	81700	0.50	1	410	390	716	8.10	10.5	11.5
13...	1133	81700	81700	0.50	1	410	360	714	8.10	10.0	11.6
13...	1134	81700	81700	0.50	1	410	330	712	8.10	10.0	11.4
13...	1135	81700	81700	0.50	1	410	300	704	8.10	10.0	11.4
13...	1136	81700	81700	0.50	1	410	270	696	8.20	10.5	12.0
13...	1137	81700	81700	0.50	1	410	240	691	8.20	10.5	12.2
13...	1138	81700	81700	0.50	1	410	210	685	8.10	10.5	12.0
13...	1139	81700	81700	0.50	1	410	180	679	8.10	10.0	11.6
13...	1140	81700	81700	0.50	1	410	150	671	8.10	10.0	11.5
13...	1141	81700	81700	0.50	1	410	120	664	8.10	10.0	11.7
13...	1142	81700	81700	0.50	1	410	90.0	657	8.10	10.0	11.8
13...	1143	81700	81700	0.50	1	410	60.0	654	8.20	9.5	12.0
13...	1144	81700	81700	0.50	1	410	30.0	650	8.10	9.5	11.3
NOV											
09...	1150	81700	81700	1.00	1	380	30.0	672	7.90	7.0	10.6
09...	1151	81700	81700	1.00	1	380	70.0	670	7.90	7.0	10.5
09...	1152	81700	81700	1.00	1	380	110	672	7.80	7.0	10.3
09...	1153	81700	81700	1.00	1	380	150	675	7.90	7.0	10.3
09...	1154	81700	81700	1.00	1	380	190	678	7.90	7.0	10.5
09...	1155	81700	81700	1.00	1	380	230	688	7.90	7.0	10.5
09...	1156	81700	81700	1.00	1	380	270	698	7.90	7.0	10.6
09...	1157	81700	81700	1.00	1	380	310	711	7.90	7.0	10.8
09...	1158	81700	81700	1.00	1	380	350	721	7.90	7.0	10.8
DEC											
08...	1205	81700	81700	1.50	1	515	465	741	8.90	3.0	10.9
08...	1206	81700	81700	2.00	1	515	415	735	8.80	3.0	10.8
08...	1207	81700	81700	2.00	1	515	365	714	8.90	3.0	10.8
08...	1208	81700	81700	1.50	1	515	315	721	8.90	3.0	10.9
08...	1209	81700	81700	1.00	1	515	285	705	9.20	3.0	10.8
08...	1210	81700	81700	1.00	1	515	245	697	9.20	3.0	10.8
08...	1211	81700	81700	1.00	1	515	205	685	9.10	3.0	10.6
08...	1212	81700	81700	1.00	1	515	165	680	9.20	3.0	10.8
08...	1213	81700	81700	1.00	1	515	125	677	9.30	3.0	10.9
08...	1214	81700	81700	1.00	1	515	85.0	675	9.30	3.0	10.7
08...	1215	81700	81700	1.00	1	515	45.0	671	9.20	3.0	11.0
JAN											
13...	0830	81700	81700	1.00	1	526	190	628	8.40	0.5	11.3
13...	0833	81700	81700	1.00	1	526	140	620	8.50	0.5	12.1
13...	0836	81700	81700	1.00	1	526	65.0	632	8.70	0.5	12.0
13...	0840	81700	81700	1.00	1	526	266	572	8.70	0.0	13.1
13...	0842	81700	81700	1.00	1	526	306	564	8.80	0.0	12.2
13...	0843	81700	81700	1.00	1	526	346	568	8.70	0.0	11.5
13...	0844	81700	81700	1.00	1	526	386	572	8.90	0.0	12.0
13...	0848	81700	81700	1.00	1	526	426	588	8.80	0.5	12.7
13...	0851	81700	81700	1.00	1	526	466	598	8.90	0.5	12.3
13...	0855	81700	81700	1.00	1	526	506	610	8.80	0.5	12.0
FEB											
09...	0820	81700	81700	1.00	1	530	55.0	663	7.40	0.5	11.7
09...	0829	81700	81700	1.00	1	530	115	610	7.40	0.5	11.9
09...	0835	81700	81700	1.00	1	530	175	686	7.30	0.5	10.6
09...	0836	81700	81700	1.00	1	530	235	715	7.20	0.5	10.0
09...	0837	81700	81700	1.00	1	530	320	720	7.10	0.0	12.2
09...	0838	81700	81700	1.00	1	530	380	719	7.20	0.0	11.9
09...	0839	81700	81700	1.00	1	530	450	723	7.30	0.0	11.6
MAR											
10...	0830	81700	81700	1.00	1	530	470	690	7.50	4.5	11.4
10...	0832	81700	81700	1.00	1	530	405	703	7.50	4.0	11.7
10...	0834	81700	81700	1.00	1	530	340	688	7.50	4.0	11.8
10...	0835	81700	81700	1.00	1	530	265	681	7.60	4.0	12.1
10...	0836	81700	81700	1.00	1	530	225	662	7.70	3.5	12.1
10...	0837	81700	81700	1.00	1	530	185	641	7.70	3.5	12.1
10...	0838	81700	81700	1.00	1	530	145	626	8.00	3.5	11.9
10...	0839	81700	81700	1.00	1	530	105	619	8.00	3.5	12.3
10...	0840	81700	81700	1.00	1	530	65.0	617	8.30	3.5	12.2
10...	0841	81700	81700	1.00	1	530	25.0	620	8.90	3.5	12.0

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR											
03...	1500	81700	81700	1.00	1	515	35.0	600	8.20	8.0	10.3
03...	1501	81700	81700	1.00	1	515	75.0	598	8.10	8.0	10.3
03...	1502	81700	81700	1.00	1	515	115	599	8.20	8.0	10.2
03...	1504	81700	81700	1.00	1	515	155	598	8.10	8.0	10.6
03...	1505	81700	81700	1.00	1	515	195	594	8.20	7.5	10.3
03...	1506	81700	81700	1.00	1	515	235	592	8.00	7.5	10.4
03...	1507	81700	81700	1.00	1	515	275	590	8.10	7.5	10.3
03...	1508	81700	81700	1.00	1	515	335	568	7.90	7.5	10.1
03...	1509	81700	81700	1.00	1	515	400	572	8.00	7.5	10.3
03...	1510	81700	81700	1.00	1	515	475	581	8.00	7.5	10.6
MAY											
08...	1024	81700	81700	1.00	1	400	40.0	682	8.60	13.0	11.7
08...	1025	81700	81700	1.00	1	400	80.0	685	8.40	13.0	11.1
08...	1026	81700	81700	1.00	1	400	120	687	8.40	13.0	10.6
08...	1027	81700	81700	1.00	1	400	160	692	8.20	13.0	10.5
08...	1028	81700	81700	1.00	1	400	200	702	8.20	13.0	10.6
08...	1029	81700	81700	1.00	1	400	240	715	8.20	13.0	11.1
08...	1030	81700	81700	1.00	1	400	280	733	8.20	13.0	11.0
08...	1031	81700	81700	1.00	1	400	320	745	8.20	12.5	10.8
08...	1032	81700	81700	1.00	1	400	360	756	8.20	12.5	11.0
30...	1145	81700	81700	1.00	1	515	25.0	595	7.60	19.0	6.7
30...	1147	81700	81700	1.00	1	515	65.0	569	7.60	19.0	6.8
30...	1149	81700	81700	1.00	1	515	105	555	7.60	19.0	6.7
30...	1151	81700	81700	1.00	1	515	145	521	7.60	18.5	6.6
30...	1153	81700	81700	1.00	1	515	185	482	7.50	18.5	6.4
30...	1225	81700	81700	1.00	1	515	225	467	7.40	18.5	6.5
30...	1232	81700	81700	1.00	1	515	265	450	7.30	18.5	6.3
30...	1235	81700	81700	1.00	1	515	315	433	7.30	18.5	6.1
30...	1237	81700	81700	1.00	1	515	400	434	7.30	18.5	6.2
30...	1239	81700	81700	1.00	1	515	465	432	7.20	18.5	6.3
JUN											
08...	0830	81700	81700	1.00	1	520	20.0	587	6.90	20.5	5.6
08...	0832	81700	81700	1.00	1	520	60.0	576	7.20	20.5	5.7
08...	0834	81700	81700	1.00	1	520	100	578	7.20	20.5	5.8
08...	0836	81700	81700	1.00	1	520	140	585	7.20	20.5	5.8
08...	0838	81700	81700	1.00	1	520	180	593	7.20	20.5	5.8
08...	0840	81700	81700	1.00	1	520	220	600	7.20	20.5	5.8
08...	0842	81700	81700	1.00	1	520	260	608	7.20	20.5	5.8
08...	0850	81700	81700	1.00	1	520	470	624	7.20	22.0	5.3
08...	0852	81700	81700	1.00	1	520	405	620	7.20	22.0	5.3
08...	0854	81700	81700	1.00	1	520	320	612	7.20	22.0	5.3
JUL											
13...	0835	81700	81700	1.00	1	390	360	711	7.90	23.5	6.4
13...	0837	81700	81700	1.00	1	390	320	705	7.90	23.5	6.9
13...	0839	81700	81700	1.00	1	390	280	693	7.90	23.5	6.7
13...	0841	81700	81700	1.00	1	390	240	685	7.90	23.5	6.6
13...	0843	81700	81700	1.00	1	390	200	675	7.90	23.5	6.5
13...	0845	81700	81700	1.00	1	390	140	663	7.90	24.0	6.6
13...	0847	81700	81700	1.00	1	390	100	652	7.90	24.0	6.6
13...	0850	81700	81700	1.00	1	390	60.0	631	7.90	24.0	6.6
13...	0852	81700	81700	1.00	1	390	20.0	643	7.90	23.5	6.5
30...	1230	81700	81700	1.00	1	400	40.0	604	7.80	24.5	6.8
30...	1231	81700	81700	1.00	1	400	80.0	600	7.80	25.0	6.9
30...	1232	81700	81700	1.00	1	400	120	604	7.80	25.0	6.8
30...	1233	81700	81700	1.00	1	400	160	612	7.80	25.0	6.8
30...	1234	81700	81700	1.00	1	400	200	625	7.80	25.0	6.8
30...	1235	81700	81700	1.00	1	400	240	638	7.80	25.0	6.9
30...	1236	81700	81700	1.00	1	400	280	651	7.80	25.0	6.8
30...	1237	81700	81700	1.00	1	400	320	670	7.80	24.5	7.0
30...	1238	81700	81700	1.00	1	400	360	681	7.80	25.0	7.0

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
AUG											
10...	1206	81700	81700	1.00	1	396	20.0	716	7.90	22.0	9.5
10...	1207	81700	81700	1.00	1	396	60.0	717	7.90	22.5	9.4
10...	1208	81700	81700	1.00	1	396	100	719	7.90	22.5	9.1
10...	1209	81700	81700	1.00	1	396	140	723	7.90	22.0	9.0
10...	1210	81700	81700	1.00	1	396	180	733	7.90	22.0	9.0
10...	1211	81700	81700	1.00	1	396	220	741	7.90	22.5	9.0
10...	1212	81700	81700	1.00	1	396	260	754	7.90	22.5	9.1
10...	1213	81700	81700	1.00	1	396	300	779	7.90	22.0	8.7
10...	1214	81700	81700	1.00	1	396	340	790	7.90	22.5	9.0
10...	1215	81700	81700	1.00	1	396	380	797	7.80	22.5	8.9
SEP											
01...	1125	81700	81700	1.00	1	420	388	696	7.80	21.0	7.7
01...	1126	81700	81700	1.00	1	420	348	696	7.80	21.0	8.0
01...	1127	81700	81700	1.00	1	420	308	686	7.90	21.5	8.0
01...	1128	81700	81700	1.00	1	420	268	676	7.90	21.5	7.9
01...	1129	81700	81700	1.00	1	420	228	670	7.90	21.5	8.0
01...	1130	81700	81700	1.00	1	420	188	663	7.90	21.5	8.1
01...	1131	81700	81700	1.00	1	420	148	652	8.00	21.5	8.1
01...	1132	81700	81700	1.00	1	420	108	644	8.00	21.5	8.4
01...	1133	81700	81700	1.00	1	420	68.0	638	8.00	21.5	8.4
01...	1134	81700	81700	1.00	1	420	28.0	610	7.80	21.5	7.9

ILLINOIS RIVER BASIN

05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE1/4 sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft upstream from Penn Central bridge, 4.5 mi downstream from Indiana-Illinois State line, and at mile 50.4.

DRAINAGE AREA.--686 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--45 years, 556 ft^3/s, 11.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s, June 13, 1958, gage height, 26.31 ft; minimum, 5.2 ft^3/s, Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,670 ft^3/s, Sept. 2, gage height, 18.25 ft; minimum daily, 8.9 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	50	e350	842	595	404	708	345	1970	129	100	2300
2	9.7	56	e320	734	517	462	1040	322	2210	118	108	e3300
3	9.9	53	e290	783	466	579	1400	294	2290	113	105	3340
4	10	52	e280	806	387	826	1880	276	2310	114	93	3090
5	14	52	e250	818	331	1230	1640	256	2280	109	83	2810
6	16	61	e220	865	302	1190	1520	233	2200	101	75	2410
7	15	64	e210	966	e280	1090	1410	e244	2010	93	71	2280
8	14	66	e190	1110	e270	1020	1310	301	1720	85	67	2130
9	13	80	e180	1250	e260	960	1150	306	1360	77	63	2540
10	12	85	e170	1280	e240	871	1040	257	958	72	58	2900
11	11	141	e160	1180	e230	727	951	257	652	69	56	2870
12	12	263	e165	996	e220	607	826	237	512	89	54	2710
13	12	294	e170	770	e230	564	611	225	521	164	49	2430
14	15	233	e180	598	e240	542	442	222	565	282	47	2180
15	17	193	e190	550	e250	557	412	219	538	246	53	2120
16	19	e190	e170	550	e260	576	394	221	472	177	64	1970
17	21	e300	e160	440	e270	683	413	208	411	112	68	1760
18	22	e500	e150	396	e280	736	421	196	367	85	66	1530
19	30	e600	e155	393	e290	738	339	200	330	85	60	1240
20	37	e500	e160	377	e290	727	316	428	302	292	56	1040
21	34	e400	e200	371	e300	717	304	664	274	457	51	862
22	41	e500	332	361	e300	731	293	586	251	402	56	742
23	41	e600	731	330	e300	695	283	474	233	367	87	677
24	36	e1000	890	328	e300	643	275	390	221	320	123	671
25	31	e700	900	396	e310	591	261	348	225	248	123	656
26	28	e600	834	437	e310	519	258	464	200	186	99	623
27	32	e500	749	567	e320	445	289	683	180	149	85	610
28	36	e450	844	661	e330	399	324	673	170	117	76	607
29	46	e400	953	674	---	493	377	759	164	98	70	602
30	47	e380	946	646	---	576	373	1500	148	92	73	586
31	47	---	931	620	---	654	---	1850	---	91	94	---
TOTAL	737.5	9363	12430	21095	8678	21552	21260	13638	26044	5139	2333	53586
MEAN	23.8	312	401	680	310	695	709	440	868	166	75.3	1786
MAX	47	1000	953	1280	595	1230	1880	1850	2310	457	123	3340
MIN	8.9	50	150	328	220	399	258	196	148	69	47	586
CFSM	.03	.45	.58	.99	.45	1.01	1.03	.64	1.27	.24	.11	2.60
IN.	.04	.51	.67	1.14	.47	1.17	1.15	.74	1.41	.28	.13	2.91

CAL YR 1988 TOTAL 121674.3 MEAN 332 MAX 2670 MIN 8.2 CFSM .48 IN. 6.60
WTR YR 1989 TOTAL 195855.5 MEAN 537 MAX 3340 MIN 8.9 CFSM .78 IN. 10.62

e Estimated

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site FL 04.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 09...	1330	17002	17002	80	745	7.30	6.0	--	8.0	26	130	340
DEC 13...	1100	17002	17002	170	888	7.90	1.0	3.5	14.1	11	110	460
JAN 18...	1100	17002	17002	400	779	7.90	2.0	2.8	14.1	11	340	380
FEB 22...	1100	17002	17002	300	766	8.60	1.0	0.50	14.7	11	80	390
APR 12...	1300	17002	17002	951	753	7.80	6.5	5.2	11.8	12	900	390
MAY 09...	1100	17002	17002	306	743	8.20	12.5	0.80	9.8	15	300	370
JUN 19...	1300	17002	17002	326	780	7.60	20.0	1.7	6.8	24	530	420
AUG 01...	1100	17002	17002	100	744	7.80	23.5	20	6.3	20	380	370
SEP 13...	1130	17002	17002	2210	611	7.50	18.5	3.2	5.8	21	120	310

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
NOV 09...	340	91	90	28	28	30	30	4.1	4.0	16	2	0.610
DEC 13...	460	130	130	35	35	19	20	2.7	2.7	4	2	9.30
JAN 18...	380	100	100	29	29	12	12	1.3	1.3	6	1	13.0
FEB 22...	390	110	110	30	30	16	16	1.5	1.5	2	1	10.0
APR 12...	390	110	110	33	31	11	11	1.8	1.9	20	4	15.0
MAY 09...	370	99	97	31	30	13	13	2.3	2.2	36	5	7.70
JUN 19...	420	120	110	33	32	13	13	1.5	0.82	41	10	8.90
AUG 01...	370	99	97	31	30	17	17	2.7	2.0	130	24	1.60
SEP 13...	310	87	84	25	24	6.7	6.7	3.5	3.0	38	6	8.20

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
NOV 09...	<0.100	<0.001	0.126	0.070	380	<50	70	67	<0.5	<0.5	120	120
DEC 13...	<0.100	<0.001	0.200	0.170	60	<50	70	68	<0.5	<0.5	90	--
JAN 18...	<0.100	<0.001	0.050	0.040	160	80	60	60	<0.5	<0.5	<50	<50
FEB 22...	<0.100	<0.004	0.046	0.020	100	70	50	48	<0.5	<0.5	<50	<50
APR 12...	0.180	0.002	0.070	0.040	580	150	60	54	<0.5	<0.5	<50	<50
MAY 09...	0.120	0.004	0.098	0.040	960	210	60	54	<0.5	<0.5	60	60
JUN 19...	0.230	0.004	0.170	0.050	2900	1100	100	79	<0.5	<0.5	60	60
AUG 01...	<0.100	<0.003	0.180	0.080	1300	<50	90	76	<0.5	<0.5	80	80
SEP 13...	<0.100	<0.001	0.165	0.130	540	70	70	64	<0.5	<0.5	60	60

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 09...	<3	<3	<5	<5	<5	<5	<5	<5	820	240	<5	<5
DEC 13...	<3	<3	<5	<5	<5	<5	<5	<5	220	<50	<5	<5
JAN 18...	<3	<3	<5	<5	<5	<5	<5	<5	250	<50	<5	<5
FEB 22...	<3	<3	<5	<5	<5	<5	<5	<5	220	72	<5	<5
APR 12...	<3	<3	<5	<5	<5	<5	<5	<5	740	<50	<5	<5
MAY 09...	--	--	6	<5	<5	<5	<5	<5	1300	75	<5	<5
JUN 19...	<3	<3	<5	<5	<5	<5	8	<5	2500	<50	<5	<5
AUG 01...	<3	<3	5	<5	<5	<5	9	<5	1700	<50	<5	<5
SEP 13...	<3	<3	<5	<5	<5	<5	<5	<5	660	59	<5	<5

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 09...	81	65	<5	<5	<3	<3.0	380	370	<5	<5	<50	<50
DEC 13...	48	43	6	8	<3	<3.0	360	380	<5	<5	<50	<50
JAN 18...	35	32	5	<5	<3	<3.0	290	--	<5	<5	<50	<50
FEB 22...	37	35	<5	5	<3	<3.0	280	280	<5	<5	<50	<50
APR 12...	52	27	<5	<5	<3	<3.0	280	270	<5	<5	<50	<50
MAY 09...	100	57	12	9	<3	<3.0	290	280	<5	<5	<50	<50
JUN 19...	110	25	<5	<5	<3	<3.0	320	310	<5	<5	<100	100
AUG 01...	140	56	<5	<5	<3	<3.0	330	320	6	<5	<50	<50
SEP 13...	36	12	6	5	<3	<3.0	220	210	<5	<5	<100	<100

ILLINOIS RIVER BASIN

05525500 SUGAR CREEK AT MILFORD, IL

LOCATION.--Lat 40°37'50", long 87°43'25", in NW1/4NE1/4 sec.16, T.25 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on pier at downstream side of highway bridge, 200 ft downstream from Mud Creek, 1 mi west of Milford, and at mile 23.9.

DRAINAGE AREA.--446 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft above National Geodetic Vertical Datum of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--41 years, 362 ft^3/s, 11.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft^3/s, Feb. 21, 1951, gage height, 20.90 ft, from rating curve extended above 8,200 ft^3/s; maximum gage height, 23.74 ft, Feb. 10, 1959, ice jam; minimum discharge, 2.0 ft^3/s, Sept. 1, 2, 7, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 27	0645	*2,200	*15.05				

Minimum daily discharge, 3.4 ft^3/s, Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	5.6	96	350	300	e100	178	561	357	109	23	350
2	5.7	5.4	77	259	229	e110	216	378	379	88	21	740
3	7.2	5.4	70	215	191	e122	1250	297	308	80	20	302
4	4.8	6.9	64	163	e140	786	1990	241	320	67	18	141
5	4.2	18	52	154	e122	1260	1960	247	260	58	18	89
6	4.2	17	55	289	e110	825	1390	318	233	48	13	71
7	3.9	21	52	456	e112	557	933	222	208	41	13	97
8	3.9	14	46	1300	e120	376	761	176	185	35	12	136
9	3.9	13	37	1300	e108	372	795	175	177	33	13	729
10	3.6	53	44	668	e92	309	704	167	165	31	13	758
11	3.6	201	56	491	e82	330	588	151	142	28	11	455
12	3.4	119	36	450	e80	351	526	143	136	26	12	292
13	3.6	69	36	448	e78	350	462	142	137	25	11	189
14	3.7	77	40	382	e78	352	418	132	132	22	10	222
15	3.9	68	37	346	e78	350	399	118	119	21	18	464
16	5.2	325	38	251	e79	264	365	108	108	19	24	387
17	8.0	737	29	223	e77	225	340	99	99	18	19	268
18	9.5	298	30	214	e78	588	311	92	94	15	15	185
19	10	90	31	216	e78	824	295	109	89	81	15	132
20	14	169	32	236	e78	564	263	717	86	499	14	104
21	13	1140	23	225	e79	562	250	762	83	257	12	88
22	11	969	51	208	e80	494	241	518	80	314	14	78
23	11	617	884	195	e80	407	230	400	77	240	20	68
24	9.8	444	1330	168	e82	371	214	334	74	119	18	57
25	9.0	344	940	156	e84	340	204	317	71	69	16	52
26	7.8	264	576	287	e86	288	197	1390	68	50	14	51
27	6.7	227	464	575	e90	258	290	2130	302	39	14	47
28	5.9	175	907	442	e98	247	715	1620	883	31	13	45
29	5.7	131	1060	372	---	241	1450	920	393	29	14	44
30	5.6	113	876	352	---	224	1080	573	194	26	15	42
31	5.4	---	452	325	---	205	---	430	---	24	11	---
TOTAL	201.9	6736.3	8521	11716	2989	12652	19015	13987	5959	2542	474	6683
MEAN	6.51	225	275	378	107	408	634	451	199	82.0	15.3	223
MAX	14	1140	1330	1300	300	1260	1990	2130	883	499	24	758
MIN	3.4	5.4	23	154	77	100	178	92	68	15	10	42
CFSM	.01	.50	.62	.85	.24	.92	1.42	1.01	.45	.18	.03	.50
IN.	.02	.56	.71	.98	.25	1.06	1.59	1.17	.50	.21	.04	.56

CAL YR 1988 TOTAL 63318.7 MEAN 173 MAX 1920 MIN 2.8 CFSM .39 IN. 5.28
WTR YR 1989 TOTAL 91476.2 MEAN 251 MAX 2130 MIN 3.4 CFSM .56 IN. 7.63

e Estimated

05525500 SUGAR CREEK AT MILFORD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV												
09...	1430	17002	17002	13	786	7.50	6.5	--	9.3	21	8100	360
DEC												
13...	1230	17002	17002	36	819	7.90	1.0	4.3	14.3	9	11000	440
JAN												
18...	1230	17002	17002	220	710	8.20	4.0	3.8	13.5	5	4900	350
FEB												
22...	1230	17002	17002	80	710	8.50	1.0	1.0	15.1	6	1900	370
APR												
12...	1400	17002	17002	522	692	8.00	7.0	9.2	11.7	6	1200	360
MAY												
09...	1230	17002	17002	185	699	6.60	12.5	6.4	9.7	7	200	340

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
NOV												
09...	360	86	85	37	36	32	32	4.0	3.9	6	4	2.50
DEC												
13...	440	100	100	45	44	17	17	2.7	2.7	3	2	11.0
JAN												
18...	350	85	83	35	34	8.9	8.7	0.7	0.69	17	2	15.0
FEB												
22...	370	87	87	37	37	12	12	0.9	1.0	3	1	13.0
APR												
12...	360	86	86	36	35	8.2	8.3	1.2	0.30	26	3	19.0
MAY												
09...	340	81	79	36	35	8.4	8.3	2.0	1.5	47	4	14.0

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
NOV 09...	0.220	0.001	0.100	0.070	300	<50	50	50	<0.5	<0.5	190	190
DEC 13...	<0.100	<0.001	0.128	0.090	90	<50	50	46	<0.5	<0.5	90	90
JAN 18...	<0.100	<0.002	0.040	0.020	320	70	40	40	<0.5	<0.5	<50	<50
FEB 22...	<0.100	<0.003	0.040	0.020	120	<50	30	28	<0.5	<0.5	60	60
APR 12...	<0.100	<0.002	0.040	0.010	890	100	40	36	<0.5	<0.5	50	50
MAY 09...	0.100	<0.001	0.070	0.030	1300	270	40	36	<1.0	<0.5	60	60

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 09...	<3	<3	27	20	<5	<5	<5	<5	580	130	<5	<5
DEC 13...	<3	<3	36	30	<5	<5	<5	<5	190	<50	<5	<5
JAN 18...	<3	<3	<5	<5	<5	<5	<5	<5	400	<50	<5	<5
FEB 22...	<3	<3	6	<5	<5	<5	<5	5	150	<50	<5	<5
APR 12...	<3	<3	<5	<5	<5	<5	<5	<5	940	<50	<5	<5
MAY 09...	--	--	9	7	<5	<5	<5	<5	1500	<50	<5	<5

DATE	MANGANESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 09...	86	53	<5	<5	<3	<3.0	250	250	<5	<5	<50	<50
DEC 13...	100	96	<5	<5	<3	<3.0	230	230	<5	<5	<50	<50
JAN 18...	31	16	<5	<5	<3	<3.0	180	180	<5	<5	<50	<50
FEB 22...	26	23	<5	<5	<3	<3.0	190	190	<5	<5	<50	<50
APR 12...	32	8	<5	<5	<3	<3.0	180	180	<5	<5	<50	<50
MAY 09...	56	22	13	8	<3	<3.0	170	160	6	<5	<50	<50

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL

LOCATION.--Lat 41°00'32", long 87°49'27", in SE1/4SW1/4 sec.10, T.29 N., R.13 W., Kankakee County, Hydrologic Unit 07120002, on right bank at upstream side of highway bridge, 3.1 mi downstream from Beaver Creek, 4.5 mi east of Chebanse, and at mile 6.5.

DRAINAGE AREA.--2,091 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 1308: 1924-28(M), 1930(M), 1936(M), 1938(M), 1942(M), 1947(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.99 ft above National Geodetic Vertical Datum of 1929. Prior to June 16, 1976, nonrecording gage, and June 17, 1976, to Aug. 13, 1979, water-stage recorder, at site 600 ft upstream at datum 2.00 ft higher. Aug. 14 to Oct. 24, 1979, nonrecording gage at present site at datum 2.00 ft higher.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--66 years, 1,655 ft^3/s, 10.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft^3/s, May 13, 1933, Mar. 7, 1979; maximum gage height, 21.68 ft, Mar. 7, 1979, present datum, ice jam; minimum discharge, 9 ft^3/s, Oct. 6-8, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in spring of 1913 reached a stage of 21.6 ft, present datum, discharge, about 34,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,400 ft^3/s, Sept. 2, gage height, 12.91 ft; minimum discharge, 50 ft^3/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	84	710	2300	1500	e720	1160	2240	4960	e380	282	6560
2	58	86	651	1780	1440	e740	1120	1700	7040	e350	258	11900
3	68	93	572	1420	1290	774	2160	1320	6810	e330	244	11500
4	64	100	531	1230	1100	1580	5260	1080	5660	e310	230	9240
5	62	98	505	1010	886	3510	6610	926	4790	e280	209	7010
6	63	100	475	1070	e800	4980	6540	845	4210	277	185	5610
7	64	107	444	1430	e750	4520	5620	834	3790	243	176	5980
8	64	128	433	2630	e700	3210	4520	758	3430	218	162	6100
9	65	152	418	3700	e660	2480	3850	683	3020	190	139	8110
10	61	246	391	3770	e650	1920	3400	670	2550	168	120	10200
11	57	353	536	3090	e640	1620	2950	660	e2010	170	108	9540
12	57	483	448	2630	e620	1530	2500	647	e1900	307	102	7840
13	63	634	405	2280	e600	1550	2200	626	e1800	413	102	6310
14	64	595	365	1990	e580	1620	1950	613	e1700	392	112	5530
15	66	492	413	1750	e650	1640	1770	589	e1600	389	144	5580
16	68	471	612	1530	e700	1620	1640	559	e1500	385	148	5350
17	82	599	616	1340	e670	1490	1490	537	e1700	328	145	4680
18	86	1290	560	1200	e680	1470	1410	503	e1600	255	151	3930
19	91	1310	433	1140	e700	1710	1350	528	e1400	248	154	3310
20	90	1080	367	1120	e670	2100	1270	1430	e1200	696	147	2740
21	100	1360	325	1130	e640	2070	1180	2780	e1100	1870	141	2240
22	106	2300	334	1130	e600	1930	1090	3190	e1000	2850	215	1870
23	122	2480	1020	1100	e580	1800	1010	2680	e940	2400	466	1610
24	122	2070	2470	1060	e600	1650	954	2140	e900	1840	533	1410
25	117	1660	3360	1030	e610	1510	923	1810	e820	1360	475	1230
26	111	1360	2970	1080	e620	1420	907	1900	e750	962	402	1070
27	111	1140	2430	1280	e640	1310	891	3330	e700	691	339	962
28	95	985	2520	1660	e700	1240	1010	4570	e630	522	284	846
29	92	876	2860	1770	---	1230	1500	4570	e520	427	246	752
30	91	770	3000	1690	---	1250	2260	4100	e450	355	247	697
31	93	---	2610	1600	---	1230	---	4160	---	312	264	---
TOTAL	2506	23502	33784	52940	21276	57424	70495	52978	70480	19918	6930	149707
MEAN	80.8	783	1090	1708	760	1852	2350	1709	2349	643	224	4990
MAX	122	2480	3360	3770	1500	4980	6610	4570	7040	2850	533	11900
MIN	53	84	325	1010	580	720	891	503	450	168	102	697
CFSM	.04	.37	.52	.82	.36	.89	1.12	.82	1.12	.31	.11	2.39
IN.	.04	.42	.60	.94	.38	1.02	1.25	.94	1.25	.35	.12	2.66

CAL YR 1988 TOTAL 360510 MEAN 985 MAX 7060 MIN 24 CFSM .47 IN. 6.41
WTR YR 1989 TOTAL 561940 MEAN 1540 MAX 11900 MIN 53 CFSM .74 IN. 10.00

e Estimated

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site FL 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC-ITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)
OCT												
13...	1345	81700	17002	10	240	E1.25	2.22	67	705	8.40	15.0	13.5
13...	1346	81700	80020	10	240	E1.25	2.22	67	678	8.81	15.0	--
13...	1350	81700	17002	10	240	E1.25	2.22	67	706	8.40	15.0	13.5
13...	1351	81700	80020	10	240	E1.25	2.22	67	678	8.81	15.0	--
NOV												
09...	1415	81700	17002	11	230	E1.00	2.71	189	670	8.40	10.0	7.5
09...	1416	81700	80020	11	230	E1.00	2.71	189	643	8.53	10.0	--
DEC												
08...	1400	81700	17002	9	255	E0.50	3.38	445	785	9.10	4.5	1.5
08...	1401	81700	80020	9	255	E0.50	3.38	445	764	8.34	4.5	--
JAN												
13...	1145	81700	17002	11	335	E1.75	6.05	2260	662	8.90	2.5	0.5
13...	1146	81700	80020	11	335	E1.75	6.05	2260	632	8.17	2.5	--
FEB												
09...	1045	81700	17002	3	335	E1.75	5.09	E660	792	7.30	-15.0	0.0
09...	1046	81700	80020	3	335	E1.75	5.09	E660	817	8.32	-15.0	--
MAR												
10...	1045	81700	17002	10	330	E1.00	5.43	1740	638	7.70	14.0	1.5
10...	1046	81700	80020	10	330	E1.00	5.43	1740	659	7.90	14.0	--
10...	1100	81700	17002	10	330	E1.00	5.43	1740	646	7.70	14.0	1.5
10...	1101	81700	80020	10	330	E1.00	5.43	1740	647	8.11	14.0	--
APR												
03...	1030	81700	17002	9	310	E1.50	5.25	1600	715	8.10	10.0	8.0
03...	1031	81700	80020	9	310	E1.50	5.25	1600	672	8.31	10.0	--
03...	1045	81700	17002	9	310	E1.50	5.25	1600	715	8.10	10.0	8.0
03...	1046	81700	80020	9	310	E1.50	5.25	1600	668	8.38	10.0	--
04...	1430	81700	17002	11	350	--	8.52	4880	637	7.40	5.5	9.0
04...	1431	81700	80020	11	350	--	8.52	4880	--	--	5.5	--
MAY												
08...	1145	81700	17002	10	250	E1.50	3.95	728	771	8.10	21.0	14.0
08...	1146	81700	80020	10	250	E1.50	3.95	728	717	8.32	21.0	--
JUN												
08...	1145	81700	17002	11	345	E2.50	6.92	3090	624	7.30	30.0	22.5
08...	1146	81700	80020	11	345	E2.50	6.92	3090	600	7.96	30.0	--
JUL												
13...	1100	81700	17002	10	260	E1.50	3.33	423	532	7.50	25.0	24.5
13...	1101	81700	80020	10	260	E1.50	3.33	423	513	7.77	25.0	--
AUG												
10...	1510	81700	17002	10	244	E1.00	2.46	119	724	8.20	26.0	27.5
10...	1511	81700	80020	10	244	E1.00	2.46	119	709	8.50	26.0	--
SEP												
01...	1330	81700	17002	11	365	E2.50	10.34	7320	320	7.20	27.5	21.5
01...	1331	81700	80020	11	365	E2.50	10.34	7320	302	7.62	27.5	--

05526000 IRQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)
OCT											
13...	2.7	13.4	16	40	--	300	99	<1.0	69	69	32
13...	--	--	--	--	--	--	--	0	--	--	--
13...	3.3	13.4	19	<10	--	300	100	<1.0	70	68	33
13...	--	--	--	--	--	--	--	0	--	--	--
NOV											
09...	5.0	12.3	25	--	--	310	110	<1.0	78	78	29
09...	--	--	--	--	--	--	--	0	--	--	--
DEC											
08...	3.1	11.8	11	--	--	410	200	<0.1	110	110	33
08...	--	--	--	K7	K8	--	--	0	--	--	--
JAN											
13...	9.6	12.0	16	<10	--	320	110	--	84	84	28
13...	--	--	--	--	K260	--	--	--	--	--	--
FEB											
09...	2.0	13.0	9	<10	--	410	180	<1.0	100	110	35
09...	--	--	--	--	K12	--	--	0	--	--	--
MAR											
10...	6.6	12.3	13	<10	--	330	160	7.0	89	86	30
10...	--	--	--	--	53	--	--	7.0	--	--	--
10...	6.3	12.2	14	<10	--	340	170	2.0	86	87	28
10...	--	--	--	--	49	--	--	2.0	--	--	--
APR											
03...	28	10.5	19	--	--	280	99	0	89	72	30
03...	--	--	--	1300	1867	--	--	0	--	--	--
03...	31	10.5	18	--	--	340	--	0	86	--	29
03...	--	--	--	1600	1567	--	--	0	--	--	--
04...	60	9.7	25	--	--	310	310	--	84	77	31
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	13	10.1	13	270	--	370	170	<1.0	95	93	34
08...	--	--	--	--	64	--	--	0	--	--	--
JUN											
08...	17	6.0	29	500	--	310	150	10	87	83	27
08...	--	--	--	--	K308	310	310	10	--	83	--
JUL											
13...	50	5.3	27	7700	--	240	100	6.0	68	63	22
13...	--	--	--	--	--	--	--	6.0	--	--	--
AUG											
10...	12	10.7	26	--	--	350	110	<1.0	94	92	31
10...	--	--	--	32	K25	--	--	0	--	--	--
SEP											
01...	170	5.6	47	--	--	140	38	6.0	46	35	18
01...	--	--	--	K9500	>8000	--	--	6.0	--	--	--

ILLINOIS RIVER BASIN

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
13...	32	38	38	3.2	3.2	--	--	--	--	206	100
13...	--	--	--	--	--	0	250	210	205	--	--
13...	32	38	38	3.3	3.2	--	--	--	--	199	100
13...	--	--	--	--	--	0	243	200	199	--	--
NOV											
09...	29	30	30	3.6	3.5	--	--	--	--	207	--
09...	--	--	--	--	--	0	254	210	208	--	--
DEC											
08...	33	14	14	2.2	2.2	--	--	--	--	210	--
08...	--	--	--	--	--	0	255	210	209	--	--
JAN											
13...	27	8.8	8.6	1.6	1.4	--	--	--	--	214	--
13...	--	--	--	--	--	0	260	210	213	--	--
FEB											
09...	35	15	14	1.4	1.3	--	--	--	--	227	--
09...	--	--	--	--	--	0	278	230	228	--	--
MAR											
10...	28	8.6	--	1.6	1.5	--	--	--	--	166	--
10...	--	--	--	--	--	0	203	170	166	--	--
10. .	29	8.3	8.4	1.5	1.5	--	--	--	--	166	--
10...	--	--	--	--	--	0	203	170	166	--	--
APR											
03...	24	10	8.6	1.4	0.80	--	--	--	--	180	--
03...	--	--	--	--	--	0	215	180	176	--	--
03...	--	10	--	0.4	--	--	--	--	--	180	--
03...	--	--	--	--	--	0	193	160	158	--	--
04...	28	10	9.8	2.5	2.0	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	34	11	11	1.8	1.1	--	--	--	--	204	98
08...	--	--	--	--	--	0	249	200	204	--	--
JUN											
08...	25	7.7	7.7	2.6	2.3	--	--	--	--	162	72
08...	25	--	7.4	--	2.9	0	195	160	160	--	--
JUL											
13...	20	8.2	7.9	4.1	3.4	--	--	--	--	139	62
13...	--	--	--	--	--	0	166	140	136	--	--
AUG											
10...	30	17	17	3.3	3.0	--	--	--	--	240	100
10...	--	--	--	--	--	0	293	240	240	--	--
SEP											
01...	12	8.1	8.0	3.1	2.6	--	--	--	--	99	31
01...	--	--	--	--	--	0	122	99	100	--	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, TOTAL (MG/L AS F) (00951)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
OCT											
13...	100	49	0.3	0.27	--	--	453	418	4	3	--
13...	--	--	--	--	--	--	--	--	--	--	<0.010
13...	100	49	0.3	0.26	--	--	453	413	4	2	--
13...	--	--	--	--	--	--	--	--	--	--	<0.010
NOV											
09...	110	38	0.2	--	--	--	410	413	6	5	--
09...	--	--	--	--	--	0.040	--	--	--	--	<0.010
DEC											
08...	160	34	0.2	--	--	--	474	518	6	2	--
08...	--	--	--	--	--	--	--	--	--	--	0.070
JAN											
13...	100	29	0.2	--	--	--	--	449	15	3	--
13...	--	--	--	--	--	--	--	--	--	--	0.040
FEB											
09...	130	40	0.2	--	--	--	555	521	4	1	--
09...	--	--	--	--	--	0.022	--	--	--	--	0.041
MAR											
10...	90	31	0.2	--	--	--	438	--	14	2	--
10...	--	--	--	--	--	--	--	--	--	--	0.040
10...	85	30	0.2	--	--	--	444	402	13	3	--
10...	--	--	--	--	--	--	--	--	--	--	0.040
APR											
03...	100	32	0.2	--	--	--	446	393	56	10	--
03...	--	--	--	--	--	--	--	--	--	--	0.060
03...	98	31	0.2	--	--	--	454	--	56	9	--
03...	--	--	--	--	--	--	--	--	--	--	0.060
04...	76	31	0.2	--	--	--	395	286	168	17	--
04...	--	--	--	--	--	--	--	--	--	--	0.050
MAY											
08...	98	32	0.2	0.17	--	--	471	441	43	7	--
08...	--	--	--	--	--	0.020	--	--	--	--	0.070
JUN											
08...	74	24	0.2	0.22	--	--	403	377	124	12	--
08...	71	21	--	0.20	9.6	--	474	282	--	--	0.220
JUL											
13...	62	24	0.2	0.24	--	--	319	294	77	10	--
13...	--	--	--	--	--	--	--	--	--	--	0.070
AUG											
10...	100	33	0.2	0.22	--	--	438	426	72	12	--
10...	--	--	--	--	--	0.010	--	--	--	--	0.010
SEP											
01...	33	14	0.2	0.14	--	--	228	173	430	50	--
01...	--	--	--	--	--	--	--	--	--	--	0.030

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
13...	<0.100	<0.100	<0.100	<0.100	<0.006	--	0.70	--	0.028	0.020	--
13...	--	<0.100	--	0.020	--	0.48	0.50	0.50	0.020	0.010	0.020
13...	<0.100	<0.100	<0.100	<0.100	<0.006	--	0.50	--	0.030	0.020	--
13...	--	<0.100	--	0.020	--	0.48	0.70	0.50	0.020	0.010	0.020
NOV											
09...	<0.100	<0.100	<0.100	<0.100	<0.004	--	0.90	--	0.050	0.050	--
09...	--	<0.100	--	0.030	--	0.47	0.80	0.50	0.050	0.020	0.020
DEC											
08...	9.40	9.70	0.100	<0.100	0.011	--	0.80	--	0.060	0.050	--
08...	--	9.80	--	0.080	--	1.2	1.5	1.3	0.060	0.040	0.060
JAN											
13...	16.0	16.0	0.080	0.080	0.005	--	0.90	--	0.100	0.060	--
13...	--	15.0	--	0.100	--	1.3	1.9	1.4	0.070	0.060	0.040
FEB											
09...	14.0	14.0	<0.100	<0.100	<0.001	--	0.60	--	0.050	0.040	--
09...	--	12.0	--	0.080	--	1.0	1.1	1.1	0.050	0.041	0.041
MAR											
10...	14.0	14.0	<0.100	0.150	<0.001	--	1.1	--	0.080	0.050	--
10...	--	13.0	--	0.120	--	0.58	0.90	0.70	0.080	0.050	0.050
10...	14.0	14.0	0.110	<0.100	<0.001	--	1.2	--	0.084	0.060	--
10...	--	13.0	--	0.150	--	3.0	3.5	3.2	0.080	0.050	0.050
APR											
03...	10.7	10.7	0.090	0.090	0.002	--	0.70	--	0.130	0.060	--
03...	--	10.0	--	0.080	--	0.82	1.1	0.90	0.140	0.060	0.050
03...	10.7	10.6	0.090	0.090	0.002	--	1.0	--	0.130	0.060	--
03...	--	10.0	--	0.080	--	0.72	1.3	0.80	0.140	0.060	0.050
04...	14.0	14.0	0.320	0.210	0.001	--	1.3	--	0.224	0.080	--
04...	--	5.50	--	0.140	--	0.96	1.3	1.1	0.120	0.080	0.030
MAY											
08...	11.0	11.0	0.240	0.120	0.008	--	1.2	--	0.090	0.030	--
08...	--	11.0	--	0.030	--	0.77	1.0	0.80	0.050	0.040	0.030
JUN											
08...	14.0	14.0	<0.100	<0.100	<0.001	--	1.5	--	0.190	0.060	--
08...	--	14.0	0.080	0.070	--	1.1	1.2	1.2	0.100	0.070	0.070
JUL											
13...	6.70	6.70	0.200	0.140	0.004	--	5.0	--	0.260	0.160	--
13...	--	6.50	--	0.110	--	0.99	1.1	1.1	0.210	0.160	0.130
AUG											
10...	1.10	1.10	<0.100	<0.100	<0.010	--	0.90	--	0.212	0.068	--
10...	--	1.20	--	0.060	--	0.54	1.1	0.60	0.140	0.050	0.050
SEP											
01...	2.00	2.00	0.150	<0.100	0.001	--	1.9	--	0.650	0.200	--
01...	--	2.10	--	0.070	--	0.73	2.2	0.80	0.410	0.180	0.170

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
13...	120	<50	--	2	2	60	54	<0.5	<0.5	180	180
13...	--	--	--	--	--	--	--	--	--	--	--
13...	150	<50	--	2	2	60	53	<0.5	<0.5	180	180
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	220	<50	--	1	1	50	49	<0.5	<0.5	130	120
09...	--	--	<1	--	--	--	--	--	--	--	--
DEC											
08...	140	<50	--	<1	<1	60	55	<0.5	<0.5	70	--
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	630	80	--	<1	<1	50	47	<0.5	<0.5	<50	<50
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	120	<50	--	<1	<1	30	31	<0.5	<0.5	60	--
09...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
10...	520	120	--	<1	<1	40	33	<0.5	<0.5	<50	<50
10...	--	--	--	--	--	--	--	--	--	--	--
10...	340	90	--	<1	<1	30	33	<0.5	<0.5	<50	<50
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	1500	140	--	1	<1	60	38	<0.5	<0.5	50	<50
03...	--	--	--	--	--	--	--	--	--	--	--
03...	140	--	--	1	<1	50	--	<0.5	--	60	--
03...	--	--	--	--	--	--	--	--	--	--	--
04...	3300	300	--	2	<1	70	42	<0.5	<0.5	60	50
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	1000	60	--	2	1	50	46	<0.5	<0.5	60	60
08...	--	--	<1	--	--	--	--	--	--	--	--
JUN											
08...	4200	1500	--	2	<1	80	61	<0.5	<0.5	50	50
08...	4500	10	--	--	--	100	54	<10	<0.5	100	80
JUL											
13...	2600	60	--	2	1	70	45	<0.5	<0.5	<50	<50
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	1200	<50	--	2	2	70	64	<0.5	<0.5	90	90
10...	--	--	<1	--	--	--	--	--	--	--	--
SEP											
01...	7200	60	--	2	1	90	21	<0.5	<0.5	50	<50
01...	--	--	--	--	--	--	--	--	--	--	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
OCT											
13...	0.17	<0.1	<5	--	<5	<5	<5	<5	150	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
13...	0.2	0.13	5	<5	<5	<5	<5	<5	180	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	0.11	0.19	<5	<5	<5	<5	5	<5	330	190	<5
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
08...	<0.1	<0.1	<5	<5	<5	<5	<5	<5	270	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<0.1	--	<5	--	<5	<5	<5	<5	850	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	--	<0.1	<5	<5	<5	<5	<5	<5	190	<50	<5
09...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	<0.1	--	5	--	<5	<5	<5	<5	610	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
10...	<0.1	--	8	5	<5	<5	<5	<5	340	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	0.2	0.2	10	<5	<5	<5	8	<5	1700	<50	<5
03...	--	--	--	--	--	--	--	--	--	--	--
03...	<0.1	<0.1	<5	--	<5	--	<5	--	<50	--	<5
03...	--	--	--	--	--	--	--	--	--	--	--
04...	1	3	16	<5	<5	<5	18	5	4300	180	7
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	0.6	2.6	6	--	<5	<5	<5	<5	1100	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	<0.1	<0.1	14	10	<5	<5	10	6	4000	<50	<5
08...	<1	<1	7	<5	--	<3	<10	<10	4900	25	6
JUL											
13...	0.1	<0.1	14	<5	<5	<5	<5	<5	3000	<50	<5
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	0.1	<0.1	5	<5	<5	<5	<5	<5	1400	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	0.3	--	14	<5	<5	<5	7	<5	9600	<50	10
01...	--	--	--	--	--	--	--	--	--	--	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT											
13...	<5	30	7	--	--	--	5	--	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
13...	<5	27	6	--	--	--	9	6	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	<5	48	10	<0.05	<0.05	--	<5	<5	<1	<5	<5.0
09...	--	--	--	--	--	3	--	--	--	--	--
DEC											
08...	<5	33	27	--	--	--	<5	--	2	<3	<3.0
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<5	33	16	--	--	--	<5	<5	3	<3	<5.0
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	<5	27	23	--	--	--	<5	<5	3	<3	<3.0
09...	--	--	--	--	--	4	--	--	--	--	--
MAR											
10...	<5	30	18	--	--	--	<5	8	2	<3	<5.0
10...	--	--	--	E0.05	E0.05	--	--	--	--	--	--
10...	<5	27	18	--	--	--	<5	<5	3	<5	<3.0
10...	--	--	--	E0.05	E0.05	--	--	--	--	--	--
APR											
03...	<5	68	8	<0.05	<0.05	--	6	<5	2	<3	<3.0
03...	--	--	--	--	--	--	--	--	--	--	--
03...	<5	7	--	<0.05	<0.05	--	<5	--	2	<3	--
03...	--	--	--	--	--	--	--	--	--	--	--
04...	<5	130	9	<0.05	<0.05	--	12	<5	2	<3	<3.0
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	<5	52	<5	<0.05	<0.05	--	<5	7	2	<3	<3.0
08...	--	--	--	--	--	3	--	--	--	--	--
JUN											
08...	<5	110	<5	<0.05	<0.05	--	<5	<5	1	<3	<3.0
08...	<10	120	6	<0.10	<0.1	<10	11	<10	--	<1	<1.0
JUL											
13...	<5	100	10	--	--	--	6	<5	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	<5	85	<5	--	--	--	<5	6	<1	<3	<3.0
10...	--	--	--	--	--	4	--	--	--	--	--
SEP											
01...	<5	350	10	--	--	--	9	<5	<1	<3	<3.0
01...	--	--	--	--	--	--	--	--	--	--	--

ILLINOIS RIVER BASIN

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
13...	270	270	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	280	270	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	290	290	<5	<5	80	72	--	--	--	--	--
09...	--	--	--	--	--	--	4.1	0.5	6.3	0.6	4.7
DEC											
08...	280	280	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	230	220	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	280	280	<5	<5	<50	<50	--	--	--	--	--
09...	--	--	--	--	--	--	5.1	0.3	3.8	0.7	2.7
MAR											
10...	200	190	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	190	--	<5	<5	<100	<100	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
03...	240	200	<5	<5	<50	<50	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
03...	230	--	<5	--	<50	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
04...	220	200	<5	<5	<50	<50	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	240	240	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	2.8	1.6	<0.4	2.6	<0.4
JUN											
08...	210	200	9	<5	<50	<50	--	--	--	--	--
08...	--	210	--	<6	30	8	--	--	--	--	--
JUL											
13...	200	190	<5	<5	<50	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	290	290	6	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	120	100	10	<5	180	160	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS- SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
13...	--	7.2	--	--	<0.005	<0.005	<5	1	--	--	--
13...	--	--	5.2	0.5	--	--	--	--	24	4.3	96
13...	--	7.4	--	--	<0.005	<0.005	--	1	--	--	--
13...	--	--	5.3	0.3	--	--	--	--	5	0.90	97
NOV											
09...	--	9.3	--	--	<0.005	<0.005	<5	1	--	--	--
09...	0.6	--	4.7	0.5	--	--	--	--	22	11	97
DEC											
08...	--	6.5	--	--	<0.005	<0.005	<5	1	--	--	--
08...	--	--	4.1	0.3	--	--	--	--	18	22	97
JAN											
13...	--	6.9	--	--	<0.005	<0.005	<5	1	--	--	--
13...	--	--	5.2	0.7	--	--	--	--	27	165	100
FEB											
09...	--	4.2	--	--	<0.005	<0.005	<5	1	--	--	--
09...	0.8	--	4.1	0.2	--	--	--	--	176	0.0	99
MAR											
10...	--	5.1	--	--	<0.005	<0.005	<5	<1	--	--	--
10...	--	--	4.1	0.4	--	--	--	--	19	89	95
10...	--	5.2	--	--	<0.005	<0.005	<5	1	--	--	--
10...	--	--	4.1	0.5	--	--	--	--	19	89	97
APR											
03...	--	6.3	--	--	--	<0.005	3	3	--	--	--
03...	--	--	4.6	0.9	--	--	--	--	51	220	98
03...	--	6.4	--	--	--	<0.005	2	<1	--	--	--
03...	--	--	4.6	0.9	--	--	--	--	56	242	98
04...	--	8.3	--	--	<0.005	<0.005	<5	<1	--	--	--
04...	--	--	--	--	--	--	--	--	184	2420	97
MAY											
08...	--	4.7	--	--	<0.005	<0.005	<5	1	--	--	--
08...	2.1	--	3.4	0.7	--	--	--	--	47	92	96
JUN											
08...	--	9.8	--	--	<0.005	0.005	<5	<1	--	--	--
08...	--	9.6	6.4	2.4	<0.01	<0.010	--	--	146	1220	99
JUL											
13...	--	9.8	--	--	<0.005	0.005	<5	--	--	--	--
13...	--	--	6.6	1.6	--	--	--	--	96	110	100
AUG											
10...	--	8.7	--	--	<0.005	<0.005	<5	--	--	--	--
10...	--	--	5.7	1.7	--	--	--	--	48	15	100
SEP											
01...	--	10	--	--	<0.005	<0.005	<5	--	--	--	--
01...	--	--	5.5	>5.0	--	--	--	--	455	8990	99

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
13...	1352	81700	81700	1.00	1	240	40.0	693	8.50	15.5	15.0
13...	1353	81700	81700	1.00	1	240	60.0	678	8.60	15.5	17.8
13...	1354	81700	81700	1.00	1	240	80.0	670	8.60	15.5	18.4
13...	1355	81700	81700	1.00	1	240	100	667	8.50	15.0	16.0
13...	1356	81700	81700	1.00	1	240	120	706	8.40	13.5	13.4
13...	1357	81700	81700	1.00	1	240	140	699	8.30	12.5	12.9
13...	1358	81700	81700	1.00	1	240	160	686	8.40	12.5	13.4
13...	1359	81700	81700	1.00	1	240	180	682	8.50	12.5	14.5
13...	1400	81700	81700	1.00	1	240	200	672	8.60	12.5	15.8
13...	1401	81700	81700	1.00	1	240	220	664	8.60	12.5	18.9
NOV											
09...	1417	81700	81700	1.00	1	230	210	644	8.00	7.5	10.8
09...	1418	81700	81700	1.00	1	230	190	646	8.20	7.0	11.4
09...	1419	81700	81700	1.00	1	230	170	659	8.30	7.0	11.8
09...	1420	81700	81700	1.00	1	230	150	661	8.30	7.5	11.9
09...	1421	81700	81700	1.00	1	230	130	670	8.40	7.5	12.3
09...	1422	81700	81700	1.00	1	230	110	670	8.60	7.5	12.6
09...	1423	81700	81700	1.00	1	230	90.0	676	8.60	7.5	12.7
09...	1424	81700	81700	1.00	1	230	70.0	679	8.50	7.5	12.7
09...	1425	81700	81700	1.00	1	230	50.0	680	8.50	7.5	12.8
09...	1426	81700	81700	1.00	1	230	30.0	680	8.50	7.0	12.4
09...	1427	81700	81700	1.00	1	230	10.0	678	8.50	7.0	12.2
DEC											
08...	1420	81700	81700	1.00	1	255	230	767	8.80	2.0	11.6
08...	1421	81700	81700	1.00	1	255	205	767	8.90	1.5	11.7
08...	1422	81700	81700	1.00	1	255	180	773	9.10	1.5	11.8
08...	1423	81700	81700	1.00	1	255	155	778	9.10	1.5	11.8
08...	1424	81700	81700	1.00	1	255	130	785	9.10	1.5	11.8
08...	1425	81700	81700	1.00	1	255	105	790	9.10	1.5	11.8
08...	1426	81700	81700	1.00	1	255	80.0	795	9.10	1.5	11.8
08...	1427	81700	81700	1.00	1	255	55.0	802	9.20	1.5	11.7
08...	1428	81700	81700	1.00	1	255	30.0	807	9.20	1.5	11.6
JAN											
13...	1115	81700	81700	1.00	1	335	325	--	8.90	0.5	12.0
13...	1119	81700	81700	1.00	1	335	295	655	8.80	0.5	11.9
13...	1122	81700	81700	1.00	1	335	265	643	8.90	0.5	12.0
13...	1126	81700	81700	1.00	1	335	235	643	8.90	0.5	11.9
13...	1128	81700	81700	1.00	1	335	205	660	9.00	0.5	11.9
13...	1130	81700	81700	1.00	1	335	175	662	8.90	0.5	12.0
13...	1132	81700	81700	1.00	1	335	145	665	9.00	0.5	12.1
13...	1133	81700	81700	1.00	1	335	115	665	9.00	0.5	12.0
13...	1135	81700	81700	1.00	1	335	85.0	668	9.10	0.5	12.1
13...	1137	81700	81700	1.00	1	335	55.0	671	9.00	0.5	12.0
13...	1139	81700	81700	1.00	1	335	25.0	673	9.10	0.5	12.0
FEB											
09...	1035	81700	81700	3.00	1	335	55.0	803	7.20	0.0	12.6
09...	1040	81700	81700	3.00	1	335	90.0	792	7.30	0.0	13.0
09...	1042	81700	81700	2.00	1	335	125	712	7.20	0.0	12.6
MAR											
10...	1044	81700	81700	1.00	1	330	20.0	645	7.80	1.5	12.1
10...	1047	81700	81700	1.00	1	330	50.0	645	7.80	1.5	12.2
10...	1048	81700	81700	1.00	1	330	80.0	644	7.80	1.5	12.0
10...	1049	81700	81700	1.00	1	330	110	643	7.80	1.0	12.0
10...	1050	81700	81700	1.00	1	330	140	642	7.70	1.0	12.1
10...	1051	81700	81700	1.00	1	330	170	638	7.70	1.5	12.3
10...	1052	81700	81700	1.00	1	330	200	643	7.70	1.5	12.3
10...	1053	81700	81700	1.00	1	330	230	644	7.70	1.5	12.2
10...	1054	81700	81700	1.00	1	330	260	644	7.70	2.0	11.7
10...	1055	81700	81700	1.00	1	330	290	639	7.70	1.5	11.9
10...	1056	81700	81700	1.00	1	330	290	639	7.80	2.0	12.0
10...	1057	81700	81700	1.00	1	330	260	642	7.70	1.5	11.8
10...	1058	81700	81700	1.00	1	330	230	645	7.70	1.5	11.9
10...	1059	81700	81700	1.00	1	330	200	645	7.70	1.5	12.2
10...	1102	81700	81700	1.00	1	330	170	646	7.70	1.5	12.2
10...	1103	81700	81700	1.00	1	330	140	645	7.60	1.0	12.5
10...	1104	81700	81700	1.00	1	330	110	648	7.60	1.0	12.1
10...	1105	81700	81700	1.00	1	330	80.0	647	7.70	1.0	12.2
10...	1106	81700	81700	1.00	1	330	50.0	650	7.60	1.0	12.4
10...	1107	81700	81700	1.00	1	330	20.0	651	7.70	1.0	12.4

ILLINOIS RIVER BASIN

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
APR											
03...	1047	81700	81700	1.00	1	310	30.0	730	7.70	9.0	9.8
03...	1048	81700	81700	1.00	1	310	60.0	730	7.60	9.0	9.7
03...	1049	81700	81700	1.00	1	310	90.0	735	7.70	9.0	10.0
03...	1050	81700	81700	1.00	1	310	120	729	7.60	9.0	10.4
03...	1051	81700	81700	1.00	1	310	150	715	8.10	8.0	10.5
03...	1053	81700	81700	1.00	1	310	180	705	8.20	8.0	10.6
03...	1054	81700	81700	1.00	1	310	210	648	8.30	8.0	10.3
03...	1055	81700	81700	1.00	1	310	230	635	8.20	7.5	10.5
03...	1056	81700	81700	1.00	1	310	270	605	8.30	7.5	10.7
04...	1544	81700	81700	1.00	1	350	25.0	659	6.90	9.0	10.4
04...	1546	81700	81700	1.00	1	350	55.0	661	7.40	9.0	10.1
04...	1548	81700	81700	1.00	1	350	85.0	655	7.40	9.0	9.9
04...	1550	81700	81700	1.00	1	350	115	648	7.40	9.0	9.9
04...	1551	81700	81700	1.00	1	350	145	641	7.50	9.0	9.8
04...	1553	81700	81700	1.00	1	350	175	637	7.40	9.0	9.7
04...	1554	81700	81700	1.00	1	350	205	628	7.50	9.0	9.7
04...	1555	81700	81700	1.00	1	350	235	620	7.50	9.0	9.6
04...	1556	81700	81700	1.00	1	350	265	618	7.60	9.0	9.5
04...	1557	81700	81700	1.00	1	350	295	616	7.50	9.0	9.5
04...	1558	81700	81700	1.00	1	350	325	609	7.50	9.0	9.5
MAY											
08...	1243	81700	81700	1.00	1	250	15.0	782	8.10	14.0	10.3
08...	1244	81700	81700	1.00	1	250	40.0	779	8.10	14.0	10.3
08...	1245	81700	81700	1.00	1	250	65.0	777	8.10	14.0	10.2
08...	1246	81700	81700	1.00	1	250	90.0	775	8.10	14.0	10.1
08...	1247	81700	81700	1.00	1	250	115	774	8.10	14.0	10.0
08...	1248	81700	81700	1.00	1	250	140	771	8.10	14.0	10.1
08...	1249	81700	81700	1.00	1	250	165	763	8.10	14.0	10.1
08...	1250	81700	81700	1.00	1	250	190	753	8.10	13.5	10.2
08...	1251	81700	81700	1.00	1	250	215	745	8.10	13.5	10.2
08...	1252	81700	81700	1.00	1	250	240	743	8.10	13.5	10.4
JUN											
08...	1125	81700	81700	1.00	1	345	30.0	663	7.00	22.5	6.3
08...	1126	81700	81700	1.00	1	345	60.0	666	7.30	22.5	6.2
08...	1127	81700	81700	1.00	1	345	90.0	662	7.30	22.5	6.1
08...	1128	81700	81700	1.00	1	345	120	620	7.30	22.5	5.9
08...	1129	81700	81700	1.00	1	345	150	620	7.40	22.5	6.1
08...	1130	81700	81700	1.00	1	345	180	621	7.30	22.5	6.0
08...	1131	81700	81700	1.00	1	345	210	624	7.30	22.5	6.0
08...	1132	81700	81700	1.00	1	345	240	621	7.40	22.5	5.8
08...	1133	81700	81700	1.00	1	345	270	619	7.30	22.5	5.9
08...	1134	81700	81700	1.00	1	345	300	624	7.40	22.5	5.9
08...	1135	81700	81700	1.00	1	345	330	628	7.40	22.5	6.0
JUL											
13...	1112	81700	81700	1.00	1	260	15.0	550	7.50	25.0	5.9
13...	1114	81700	81700	1.00	1	260	40.0	546	7.50	25.0	5.5
13...	1116	81700	81700	1.00	1	260	65.0	540	7.50	24.5	5.4
13...	1118	81700	81700	1.00	1	260	90.0	537	7.50	24.5	5.3
13...	1120	81700	81700	1.00	1	260	115	533	7.50	24.5	5.4
13...	1122	81700	81700	1.00	1	260	140	532	7.50	24.5	5.3
13...	1124	81700	81700	1.00	1	260	165	531	7.50	24.5	5.3
13...	1126	81700	81700	1.00	1	260	190	530	7.50	24.5	5.3
13...	1128	81700	81700	1.00	1	260	215	530	7.60	24.0	5.4
13...	1130	81700	81700	1.00	1	260	240	527	7.60	24.0	5.6
AUG											
10...	1515	81700	81700	1.00	1	244	220	717	8.10	28.5	11.0
10...	1516	81700	81700	1.00	1	244	200	717	8.10	28.5	11.2
10...	1517	81700	81700	1.00	1	244	180	719	8.20	28.0	11.0
10...	1518	81700	81700	1.00	1	244	160	722	8.10	28.0	10.7
10...	1519	81700	81700	1.00	1	244	140	724	8.20	27.5	10.7
10...	1520	81700	81700	1.00	1	244	120	725	8.20	27.5	10.5
10...	1521	81700	81700	1.00	1	244	100	725	8.20	27.5	10.6
10...	1522	81700	81700	1.00	1	244	80.0	725	8.20	27.5	10.6
10...	1523	81700	81700	1.00	1	244	60.0	725	8.10	27.0	10.6
10...	1524	81700	81700	1.00	1	244	40.0	724	8.10	26.5	10.6

05526000 IROQUOIS RIVER NEAR CHENBASE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
SEP											
01...	1400	81700	81700	1.00	1	365	30.0	323	7.70	21.5	6.9
01...	1402	81700	81700	1.00	1	365	60.0	324	7.30	21.5	7.1
01...	1404	81700	81700	1.00	1	365	90.0	328	7.30	21.5	7.5
01...	1406	81700	81700	1.00	1	365	120	331	7.30	21.5	7.0
01...	1408	81700	81700	1.00	1	365	150	331	7.30	21.0	7.0
01...	1410	81700	81700	1.00	1	365	180	331	7.30	21.0	7.1
01...	1412	81700	81700	1.00	1	365	210	330	7.30	21.5	7.0
01...	1414	81700	81700	1.00	1	365	240	326	7.30	21.0	7.1
01...	1416	81700	81700	1.00	1	365	270	316	7.30	21.0	7.0
01...	1418	81700	81700	1.00	1	365	300	260	7.20	21.0	7.0
01...	1420	81700	81700	1.00	1	365	330	230	7.10	21.0	7.0

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL

LOCATION.--Lat 41°20'48", long 88°11'11", in NW1/4NW1/4 sec.15, T.33 N., R.9 E., Will County, Hydrologic Unit 07120001, on right bank, 0.4 mi downstream from Prairie Creek, 0.5 mi upstream from bridge on Interstate 55, 5 mi downstream from Wilmington, and at mile 5.7.

DRAINAGE AREA.--5,150 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1308. December 1914 to September 1933 at site 8.5 mi upstream, published as Kankakee River at Custer Park. Records may not be equivalent.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-83-2: 1982(M).

GAGE.--Water-stage recorder. Datum of gage is 510.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation at low flow caused by powerplants upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--56 years, 4,343 ft^3/s, 11.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,900 ft^3/s, July 13, 1957, gage height, 11.40 ft; maximum gage height, 13.88 ft, Jan. 30, 1968, ice jam; minimum discharge, 204 ft^3/s, Aug. 1, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in 1883, 1887 reached a stage of 16.73 ft, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,200 ft^3/s, June 1, gage height, 5.52 ft; minimum daily discharge, 833 ft^3/s, Oct 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1110	1600	4770	7550	5540	3940	5310	5400	e13000	4030	2940	7550
2	1130	1520	4610	6800	5370	3440	5200	4940	19800	3690	2900	17300
3	1060	1460	4430	6200	5190	3380	6090	4410	18100	3380	2750	15300
4	981	1630	4260	5780	4870	4040	10300	4020	16800	3130	2580	12700
5	1010	1740	4010	5150	4690	7030	13000	3860	14600	2930	2450	10100
6	958	1700	3800	4990	4080	7440	12800	3680	13000	2740	2400	9510
7	936	1670	3630	5580	e4300	7450	12000	3580	11800	2590	2210	10600
8	924	1600	3500	8810	e4200	6860	10600	3460	10700	2390	2020	10300
9	957	1720	3360	10600	e4100	6140	9560	3330	9810	2230	1960	16900
10	975	2230	3210	10900	e3700	5590	8820	3180	9100	2090	1900	17800
11	966	2720	3140	9260	e3400	5260	8180	3080	8360	1970	1830	15700
12	920	3210	3310	8370	e3300	5230	7620	3020	7820	3140	1840	13500
13	860	3730	3110	7900	3110	5100	7170	3020	7490	3020	1860	11700
14	833	4130	2850	7490	3630	5030	6730	3020	7200	2980	1750	10800
15	872	4230	2710	7170	4060	5070	6220	2910	6830	2600	1780	10200
16	997	4570	e2900	6700	5510	5030	5750	2770	6500	2640	1820	9630
17	1120	5020	e3000	6210	5720	4920	5370	2700	6220	2520	1830	8780
18	1150	5420	e3100	5830	4790	4950	5080	2670	5860	2540	1810	7860
19	1140	6030	e3000	5550	4150	5190	4790	2770	5500	5810	1760	7080
20	1300	6110	3080	5420	3590	5620	4650	3690	5150	5660	1670	6410
21	1830	6160	2580	5360	3550	5800	4570	5070	4910	5520	1590	5760
22	2140	6890	2490	5240	4480	5720	4420	5930	4710	6760	1660	5240
23	2360	7680	3280	5100	5130	5670	4250	5580	4610	6470	2120	4860
24	2260	7410	5280	4910	4470	5530	4020	4900	4540	5820	2360	4550
25	2060	6840	7100	4810	4300	5310	3840	4400	4540	5220	2430	4210
26	1990	6460	7410	4900	3340	5090	3800	4540	4300	4710	2340	3880
27	2050	6040	6880	5290	3920	4800	3800	5160	4160	4210	2230	3680
28	2110	5630	7220	5590	3670	4710	3790	6680	4210	3670	2100	3520
29	2050	5270	7960	5900	---	5400	4070	7330	4180	3220	1980	3470
30	1930	4970	8180	5890	---	6160	4820	8430	4340	3250	1920	3360
31	1800	---	8050	5730	---	5630	---	8480	---	3060	1990	---
TOTAL	42778	125390	136210	200980	120160	166530	196620	136010	248140	113990	64780	272250
MEAN	1380	4180	4394	6483	4291	5372	6554	4387	8271	3677	2090	9075
MAX	2360	7680	8180	10900	5720	7450	13000	8480	19800	6760	2940	17800
MIN	833	1460	2490	4810	3110	3380	3790	2670	4160	1970	1590	3360
CFSM	.27	.81	.85	1.26	.83	1.04	1.27	.85	1.61	.71	.41	1.76
IN.	.31	.91	.98	1.45	.87	1.20	1.42	.98	1.79	.82	.47	1.97

CAL YR 1988 TOTAL 1313873 MEAN 3590 MAX 17500 MIN 286 CFSM .70 IN. 9.49
WTR YR 1989 TOTAL 1823839 MEAN 4997 MAX 19800 MIN 833 CFSM .97 IN. 13.17

e Estimated

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site F 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
05...	0930	17002	17002	1010	648	8.70	14.0	2.7	12.8	12	5
17...	0930	17002	17002	1090	648	8.00	14.5	0.32	9.8	17	K90
NOV											
09...	0930	17002	17002	1680	674	8.10	7.0	1.4	11.5	11	K60
23...	1100	17002	17002	7690	689	7.60	6.0	48	10.3	17	320
DEC											
06...	0900	17002	17002	3840	705	8.00	3.5	4.8	12.9	21	K10
21...	0930	17002	17002	2580	710	8.10	1.0	7.6	13.6	13	K10
29...	0955	17002	17002	7950	601	7.90	0.0	21	13.8	11	450
JAN											
09...	0940	17002	17002	10200	651	8.40	0.0	120	13.6	29	500
FEB											
08...	0930	17002	17002	E4200	763	8.40	0.0	7.2	14.6	13	K30
MAR											
14...	0930	17002	17002	5040	669	8.30	7.0	9.2	12.0	12	K70
APR											
10...	1325	17002	17002	8700	654	7.30	7.0	22	11.2	21	--
MAY											
10...	1110	17002	17002	3140	702	7.90	13.5	12	11.3	16	--
JUN											
05...	1050	17002	17002	14800	519	7.40	19.5	74	7.5	40	--
JUL											
11...	1010	17002	17002	1810	678	7.70	30.5	6.6	8.8	24	--

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
05...	330	150	82	81	32	31	24	24	2.5	2.5	180
17...	310	180	77	72	33	31	20	19	2.7	2.6	128
NOV											
09...	350	140	91	91	30	30	17	17	2.8	2.9	212
23...	330	160	86	83	29	29	13	13	2.7	2.4	164
DEC											
06...	350	150	96	93	29	28	13	13	2.1	2.1	200
21...	350	140	97	93	30	29	15	15	1.9	1.7	212
29...	320	160	84	82	27	27	13	13	1.9	1.8	160
JAN											
09...	280	280	76	73	26	24	13	13	2.3	1.8	--
FEB											
08...	360	150	98	94	31	30	14	14	1.7	1.7	208
MAR											
14...	330	150	87	86	28	28	12	--	1.7	1.7	180
APR											
10...	330	160	90	86	29	28	11	11	0.6	0.76	168
MAY											
10...	360	170	97	93	33	32	19	19	1.5	1.7	196
JUN											
05...	230	100	69	60	23	19	7.7	7.2	4.8	3.4	128
JUL											
11...	310	150	79	74	32	31	18	18	2.3	0.53	168

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
05...	130	33	0.3	410	1	1	0.700	0.020	0.002	0.38	0.40
17...	130	59	0.4	388	3	2	0.200	0.010	<0.001	0.39	0.40
NOV											
09...	120	28	0.2	421	2	2	1.20	0.010	<0.001	0.49	0.50
23...	110	30	0.3	367	42	10	8.80	0.110	<0.001	1.2	1.3
DEC											
06...	120	30	0.2	407	4	3	3.60	0.040	<0.001	0.66	0.70
21...	120	27	0.2	412	5	2	2.20	0.100	0.001	0.60	0.70
29...	120	35	0.2	372	29	7	9.60	0.120	<0.001	1.1	1.2
JAN											
09...	96	250	0.4	455	146	24	9.00	0.140	0.003	1.6	1.7
FEB											
08...	130	33	0.3	432	6	3	5.80	0.120	0.003	0.68	0.80
MAR											
14...	110	29	0.3	--	17	4	6.50	0.070	0.002	0.63	0.70
APR											
10...	100	27	0.3	357	39	--	11.0	0.070	<0.001	1.0	1.1
MAY											
10...	120	31	0.2	418	17	--	4.90	0.030	<0.001	0.67	0.70
JUN											
05...	73	22	0.2	262	185	--	9.40	0.110	0.001	1.8	1.9
JUL											
11...	130	28	0.2	386	27	--	1.20	0.050	0.002	0.85	0.90

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
OCT											
05...	1.1	0.070	0.070	70	<50	2	40	39	<0.5	<0.5	90
17...	0.60	0.030	0.030	1000	150	1	30	24	<0.5	<0.5	170
NOV											
09...	1.7	0.030	0.020	150	410	<1	40	42	<0.5	<0.5	50
23...	10	0.140	0.050	1100	<50	2	50	40	<0.5	<0.5	70
DEC											
06...	4.3	0.050	0.030	110	<50	1	30	32	<0.5	<0.5	60
21...	2.9	0.060	0.030	150	<50	1	30	29	<0.5	<0.5	60
29...	11	0.110	0.060	620	<50	1	30	20	<0.5	<0.5	60
JAN											
09...	11	0.240	0.090	2900	220	3	60	50	<0.5	<0.5	50
FEB											
08...	6.6	0.050	0.050	140	60	1	50	43	<0.5	<0.5	60
MAR											
14...	7.2	0.080	0.020	330	<50	<1	10	11	<0.5	<0.5	60
APR											
10...	12	0.100	0.030	1400	450	1	60	46	<0.5	<0.5	60
MAY											
10...	5.6	0.070	0.030	550	230	1	60	51	<1.0	<0.5	90
JUN											
05...	11	0.290	0.060	6300	240	4	100	44	<0.5	<0.5	60
JUL											
11...	2.1	0.090	0.020	400	70	2	50	44	<0.5	<0.5	80

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
OCT										
05...	90	<3	<3	<5	<5	<5	<5	<5	<5	110
17...	150	<3	<3	<5	<5	<5	<5	<5	<5	150
NOV										
09...	--	<3	<3	<5	<5	<5	<5	<5	<5	110
23...	60	<3	<3	<5	<5	<5	<5	<5	<5	1700
DEC										
06...	60	<3	<3	<5	<5	<5	<5	<5	<5	410
21...	--	<3	<3	<5	<5	<5	<5	<5	<5	540
29...	50	<3	<3	<5	<5	<5	<5	<5	5	1200
JAN										
09...	<50	<3	<3	48	6	<5	<5	9	5	4900
FEB										
08...	60	<3	<3	<5	<5	<5	<5	9	<5	420
MAR										
14...	--	<3	<3	37	<5	<5	<5	<5	<5	750
APR										
10...	60	<3	<3	5	<5	<5	<5	<5	<5	1700
MAY										
10...	90	<3	<3	<5	<5	<5	<5	<5	<5	620
JUN										
05...	50	<3	<3	12	5	<5	<5	7	<5	7500
JUL										
11...	90	<3	<3	<5	<5	<5	<5	<5	<5	520

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT										
05...	<50	<5	<5	11	<5	<0.05	<5	<5	<3	<3.0
17...	<50	<5	<5	18	<5	<0.05	<5	6	<3	<3.0
NOV										
09...	66	<5	<5	<5	6	<0.05	<5	<5	<3	<3.0
23...	<50	<5	<5	120	11	<0.05	5	<5	<3	<3.0
DEC										
06...	110	<5	<5	42	27	<0.05	<5	<5	<3	<3.0
21...	<50	<5	<5	58	17	<0.05	<5	<5	<3	<3.0
29...	<50	<5	<5	99	18	0.07	<5	<5	<3	<3.0
JAN										
09...	310	8	<5	240	120	0.12	21	9	<5	<5.0
FEB										
08...	<50	<5	<5	64	39	<0.05	6	<5	<3	<3.0
MAR										
14...	<50	<5	<5	52	19	<0.05	11	<5	<3	<3.0
APR										
10...	<50	<5	<5	100	10	<0.05	<5	--	<3	<3.0
MAY										
10...	<50	<5	<5	30	<5	<0.05	<5	<5	<3	<3.0
JUN										
05...	<50	7	<5	260	<5	<0.05	23	12	<3	<3.0
JUL										
11...	<50	<5	<5	87	<5	<0.05	<5	<5	<3	<3.0

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
05...	150	150	<5	<5	<50	<50	16	<0.005	3	<1
17...	160	150	<5	<5	<50	<50	6.2	<0.005	2	1
NOV										
09...	160	170	<5	<5	<50	<50	61	<0.005	2	1
23...	170	160	<5	<5	<100	<100	8.7	<0.005	4	<1
DEC										
06...	180	170	<5	<5	<50	<50	7.6	<0.005	5	1
21...	180	170	<5	<5	<50	<50	6.6	<0.005	2	<1
29...	170	160	<5	<5	<50	<50	54	0.005	2	1
JAN										
09...	140	140	6	<5	<100	<100	25	<0.005	5	1
FEB										
08...	170	170	<5	<5	<50	<50	6.0	<0.005	2	<1
MAR										
14...	150	--	<5	<5	<50	<50	5.8	<0.005	2	3
APR										
10...	170	170	<5	<5	<50	<50	--	<0.005	4	--
MAY										
10...	190	190	<5	<5	<50	<50	--	<0.005	4	--
JUN										
05...	130	110	11	<5	<50	<50	--	<0.005	3	--
JUL										
11...	160	160	<5	<5	<50	<50	--	<0.005	2	--

05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATION.--Lat 42°29'22", long 87°55'32", in SE1/4 sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on right bank at upstream side of Russell Road bridge, 0.3 mi west of Russell, 7.2 mi upstream from Mill Creek, and at mile 109.3.

DRAINAGE AREA.--123 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum, water years 1962-66. June 1967 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-76-1: 1960-68(M), 1973(M).

GAGE.--Water-stage recorder. Datum of gage is 662.00 ft above National Geodetic Vertical Datum of 1929. Oct. 17, 1961, to June 29, 1967, crest-stage gage at left downstream side of bridge at datum 4.29 ft higher.

REMARKS.--Water-discharge records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--22 years, 96.8 ft^3/s, 10.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft^3/s, Mar. 21, 1979, gage height, 9.69 ft; maximum gage height, 10.75 ft, Mar. 6, 1976, and Sept. 27, 1986; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 155 ft^3/s, Sept. 7, gage height, 5.42 ft; no flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	6.4	40	e23	e27	e9.5	120	24	24	5.8	30	39
2	.03	6.6	38	e21	e28	e9.5	117	22	26	3.6	31	87
3	.04	9.3	37	e20	e25	e9.5	107	20	26	3.0	27	104
4	.01	14	34	e19	e22	e10	97	19	27	3.2	27	118
5	.00	18	34	e18	e20	e11	86	19	22	3.9	31	131
6	.00	18	33	e20	e17	e12	77	17	6.8	4.3	32	144
7	.00	18	32	e21	e15	e13	69	17	3.1	5.4	32	151
8	.00	21	32	e22	e13	e15	62	16	2.4	7.5	33	152
9	.00	24	30	e23	e12	e25	55	15	2.0	5.8	31	151
10	.00	29	31	e25	e12	e40	48	14	1.8	5.7	23	142
11	.05	32	29	e28	e11	69	44	13	2.7	4.8	12	128
12	.05	33	28	e29	e11	87	39	14	5.1	4.7	6.2	106
13	.00	34	28	e28	e11	100	37	14	7.9	5.1	3.0	88
14	.00	34	29	e26	e11	106	32	14	10	6.5	1.9	73
15	.00	33	29	e23	e10	126	28	16	12	8.0	2.3	e60
16	.00	39	27	e22	e10	119	28	17	14	9.0	1.5	e45
17	.26	44	26	e24	e10	108	26	18	16	8.6	1.2	e35
18	.52	47	25	e23	e10	98	24	20	16	9.9	.99	e25
19	.32	52	24	e22	e9.5	75	23	22	3.9	11	.75	e18
20	.24	52	26	e21	e9.5	64	23	22	1.6	13	.79	e13
21	1.6	46	26	e20	e9.5	58	21	22	1.2	15	.92	e11
22	.48	42	26	e20	e9.5	53	19	22	1.3	16	1.9	e8.0
23	.59	38	27	e20	e9.0	50	18	22	2.0	18	2.1	e6.0
24	1.1	36	27	e20	e9.0	48	18	22	3.2	17	2.1	e4.0
25	1.5	33	25	e20	e9.0	48	20	26	7.7	15	2.3	e3.0
26	1.4	34	26	e21	e9.5	54	22	27	13	14	2.1	e2.5
27	2.0	37	27	e22	e9.5	62	25	27	20	14	2.4	e2.0
28	4.3	41	e26	e23	e9.5	72	26	25	23	15	4.8	e1.5
29	5.3	42	e25	e24	---	85	29	22	15	17	15	e1.2
30	5.5	42	e24	e25	---	102	29	22	9.4	21	23	e1.0
31	6.4	---	e25	e26	---	115	---	23	---	28	19	---
TOTAL	31.69	955.3	896	699	368.5	1853.5	1369	613	326.1	318.8	403.25	1850.2
MEAN	1.02	31.8	28.9	22.5	13.2	59.8	45.6	19.8	10.9	10.3	13.0	61.7
MAX	6.4	52	40	29	28	126	120	27	27	28	33	152
MIN	.00	6.4	24	18	9.0	9.5	18	13	1.2	3.0	.75	1.0
CFSM	.01	.26	.23	.18	.11	.49	.37	.16	.09	.08	.11	.50
IN.	.01	.29	.27	.21	.11	.56	.41	.19	.10	.10	.12	.56

CAL YR 1988 TOTAL 23220.92 MEAN 63.4 MAX 438 MIN .00 CFSM .52 IN. 7.02
WTR YR 1989 TOTAL 9684.34 MEAN 26.5 MAX 152 MIN .00 CFSM .22 IN. 2.93

e Estimated

05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-60, 1964-69, 1971-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 08.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
04...	1000	17002	17002	0.06	1330	7.70	13.0	23	6.2	12	180
NOV											
17...	1230	17002	17002	44	962	7.30	5.5	29	10.6	16	350
JAN											
04...	1230	17002	17002	19	1560	7.70	0.0	5.7	16.6	9	K400
FEB											
10...	1230	17002	17002	12	1520	8.00	0.0	3.1	11.6	15	K120
APR											
05...	1035	81700	80020	100	990	8.30	7.0	--	10.2	--	--
05...	1230	17002	17002	86	989	7.70	8.0	12	9.9	27	K20
MAY											
25...	1110	81700	80020	27	452	7.70	23.0	--	3.7	--	--
26...	1100	17002	17002	27	1180	7.90	22.0	4.6	5.1	38	310
JUN											
22...	1351	17002	17002	1.3	1070	8.80	28.0	17	12.4	47	350
AUG											
03...	1230	17002	17002	28	903	7.60	26.0	10	5.1	36	120

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT											
04...	750	750	170	170	81	80	21	--	4.1	4.0	38
NOV											
17...	380	380	88	85	42	40	49	47	5.5	5.1	23
JAN											
04...	610	610	140	130	67	66	90	87	5.5	5.2	5
FEB											
10...	640	640	140	140	68	68	58	58	4.0	4.0	2
APR											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	450	450	100	99	50	48	39	38	2.5	2.4	21
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
26...	500	500	110	110	57	56	61	61	5.1	4.5	55
JUN											
22...	370	370	66	62	56	53	89	85	3.5	3.1	34
AUG											
03...	350	350	83	77	40	37	49	46	5.7	4.7	46

05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)
OCT										
04...	8	<0.100	--	0.020	<0.001	0.100	0.050	910	<50	80
NOV										
17...	4	5.60	--	0.040	<0.001	0.150	0.110	890	190	40
JAN										
04...	1	5.50	--	0.020	<0.001	0.190	0.150	190	90	30
FEB										
10...	1	4.50	--	0.230	0.002	0.120	0.090	120	60	50
APR										
05...	--	--	7.40	--	--	--	--	--	--	--
05...	4	7.40	--	0.060	<0.001	0.080	0.040	830	310	40
MAY										
25...	--	--	0.240	--	--	--	--	--	--	--
26...	12	0.200	--	0.240	0.009	0.200	0.050	1700	480	60
JUN										
22...	12	<0.100	--	0.100	0.032	0.310	0.224	1100	80	30
AUG										
03...	12	6.20	--	0.160	0.004	0.200	0.110	1100	100	60

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT										
04...	68	<0.5	<0.5	80	--	10	<3	<5	<5	<5
NOV										
17...	37	<0.5	<0.5	<50	<50	<3	<3	5	<5	<5
JAN										
04...	30	<0.5	<0.5	190	190	<3	<3	<5	5	<5
FEB										
10...	44	<0.5	<0.5	140	130	<3	<3	<5	<5	<5
APR										
05...	--	--	--	--	--	--	--	--	--	--
05...	40	<0.5	<0.5	80	80	<3	<3	5	5	<5
MAY										
25...	--	--	--	--	--	--	--	--	--	--
26...	56	<0.5	<0.5	200	200	<3	<3	9	9	<5
JUN										
22...	21	<0.5	<0.5	220	210	<3	<3	<5	<5	<5
AUG										
03...	51	<0.5	<0.5	130	120	<3	<3	<5	<5	<5

05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
OCT										
04...	<5	<5	<5	1400	<50	<5	<5	150	100	<5
NOV										
17...	<5	<5	<5	950	<50	<5	<5	20	10	<5
JAN										
04...	<5	<5	<5	310	<50	<5	<5	16	16	<5
FEB										
10...	<5	<5	<5	190	<50	<5	<5	62	59	<5
APR										
05...	--	--	--	--	--	--	--	--	--	--
05...	<5	<5	<5	770	<50	5	<5	37	31	<5
MAY										
25...	--	--	--	--	--	--	--	--	--	--
26...	<5	<5	<5	1800	<50	<5	<5	230	150	11
JUN										
22...	<5	<5	<5	1100	<50	5	<5	130	64	<5
AUG										
03...	<5	<5	5	1600	<50	<5	<5	100	66	<10

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)
OCT										
04...	<5	<3	<3.0	550	--	8	7	<100	<100	<0.005
NOV										
17...	<5	<3	<3.0	890	860	<5	<5	<100	<100	<0.005
JAN										
04...	--	<3	<3.0	1800	1700	<5	<5	<50	<50	<0.005
FEB										
10...	<5	<3	<3.0	1300	--	<5	<5	<50	<50	<0.005
APR										
05...	--	--	--	--	--	--	--	--	--	--
05...	<5	<3	<3.0	520	510	<5	<5	<50	<50	<0.005
MAY										
25...	--	--	--	--	--	--	--	--	--	--
26...	10	<3	<3.0	1200	1200	<5	<5	<50	<50	<0.005
JUN										
22...	<5	<3	<3.0	1100	1100	<5	<5	<100	<100	<0.005
AUG										
03...	<10	<3	<3.0	860	830	<5	<5	<50	<50	<0.005

ILLINOIS RIVER BASIN

05528000 DES PLAINES RIVER NEAR GURNEE, IL

LOCATION.--Lat 42°20'39", long 87°56'18", in SE1/4SW1/4 sec.27, T.45 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank 800 ft upstream from bridge on State Highway 120, 2.5 mi southwest of Gurnee, and at mile 94.2.

DRAINAGE AREA.--232 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1958, and annual maximum, water years 1960-68, October 1968 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-76-1: 1960(M), 1962(M). WDR IL-77-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 650.30 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to May 26, 1946, nonrecording gage at site 825 ft downstream at same datum. May 27, 1946, to Sept. 30, 1958, water-stage recorder at site 800 ft downstream at same datum. Dec. 17, 1959, to September 1968, crest-stage gage at site 800 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Effluent from sewage treatment plants 0.5 mi upstream averaged about 50 ft^3/s per day. Gage-height telemeter at station.

AVERAGE DISCHARGE.--34 years (water years 1946-58, 1969-89), 188 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft^3/s, Sept. 27, 1986, gage height, 11.95 ft; no flow Sept. 26 to Oct. 19, 1956, and part of each day Aug. 27-30, Sept. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 279 ft^3/s, Sept. 13, gage height, 3.31 ft; minimum daily, 30 ft^3/s, Oct. 5, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	31	110	63	93	49	236	122	134	80	103	212
2	46	40	96	59	90	49	237	111	113	69	99	186
3	40	42	87	59	85	50	237	107	117	64	95	184
4	32	82	85	56	85	106	234	100	127	57	134	183
5	30	66	80	54	90	110	223	95	119	54	191	185
6	31	71	77	58	83	102	209	90	121	56	155	213
7	30	66	72	64	75	92	190	85	108	56	130	214
8	35	62	68	80	72	92	166	86	81	54	123	215
9	33	71	63	69	67	99	147	82	72	60	115	228
10	36	136	61	62	65	124	136	77	65	64	106	231
11	37	98	59	67	63	171	125	74	61	58	99	238
12	35	95	62	74	61	206	117	71	72	55	89	232
13	32	105	58	73	62	217	109	66	87	51	81	252
14	38	90	59	66	61	226	104	69	71	50	82	231
15	38	81	55	60	62	239	100	64	62	47	69	204
16	35	175	54	65	59	244	99	62	62	46	65	174
17	35	105	52	62	59	247	103	62	60	49	64	148
18	34	115	49	61	55	243	98	60	55	55	59	126
19	37	129	50	62	55	222	97	61	55	84	54	105
20	38	130	52	62	55	202	93	62	62	89	56	93
21	39	123	61	59	56	172	90	61	53	108	53	87
22	40	114	53	59	55	147	85	60	49	87	52	83
23	51	105	72	60	53	136	84	59	64	79	51	78
24	49	95	65	60	53	130	82	59	82	78	51	73
25	44	91	53	63	51	126	103	85	55	81	48	71
26	40	115	54	78	51	127	110	105	78	90	45	63
27	37	116	87	70	55	136	103	82	184	82	44	60
28	36	117	77	74	53	172	121	69	168	85	71	58
29	35	115	65	84	---	233	126	91	124	75	70	55
30	33	115	69	89	---	234	123	94	100	143	63	52
31	33	---	67	90	---	236	---	111	---	117	66	---
TOTAL	1143	2896	2072	2062	1824	4939	4087	2482	2661	2223	2583	4534
MEAN	36.9	96.5	66.8	66.5	65.1	159	136	80.1	88.7	71.7	83.3	151
MAX	51	175	110	90	93	247	237	122	184	143	191	252
MIN	30	31	49	54	51	49	82	59	49	46	44	52

CAL YR 1988 TOTAL 69762 MEAN 191 MAX 1340 MIN 30
WTR YR 1989 TOTAL 33506 MEAN 91.8 MAX 252 MIN 30

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year. Additional chemical data for water year 1959-61, 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 07.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT 04...	0830	17002	17002	27	1050	7.20	15.5	5.9	7.9	24	200
NOV 17...	1400	17002	17002	94	1030	7.30	9.0	46	8.8	21	K53
JAN 04...	1400	17002	17002	53	1190	7.90	6.0	4.1	11.8	24	K80
FEB 10...	1400	17002	17002	64	1370	7.50	5.0	4.9	9.5	42	<10
APR 05...	1400	17002	17002	224	1060	7.50	8.5	12	10.3	34	K10
MAY 26...	1200	17002	17002	108	1100	7.80	19.5	6.7	7.8	35	K920
JUN 22...	1500	17002	17002	49	1210	7.10	23.5	15	8.1	30	220
AUG 03...	1400	17002	17002	96	1050	7.90	25.5	4.5	8.4	35	380

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 04...	280	--	73	--	23	23	120	120	10	10	92
NOV 17...	350	350	82	81	36	36	85	85	7.2	7.0	130
JAN 04...	340	340	83	81	35	34	110	110	9.2	9.1	160
FEB 10...	360	360	87	87	34	34	120	120	9.9	9.6	170
APR 05...	410	410	95	93	44	43	67	65	4.3	4.6	160
MAY 26...	360	360	83	81	40	39	83	82	6.9	6.3	150
JUN 22...	320	320	80	77	32	31	130	120	8.9	9.0	140
AUG 03...	310	310	73	71	33	32	100	100	7.0	6.5	100

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 04...	140	--	8	2	14.0	0.070	<0.001	1.74	1.66	290	--
NOV 17...	120	466	37	8	4.80	1.10	0.004	0.560	0.490	1100	170
JAN 04...	150	546	7	4	11.0	0.080	<0.001	1.45	1.34	150	<50
FEB 10...	190	611	6	3	11.0	0.380	0.002	1.71	1.57	150	60
APR 05...	120	487	21	2	8.20	0.260	0.001	0.470	0.430	760	300
MAY 26...	130	496	25	5	5.10	0.170	0.004	0.680	0.550	960	510
JUN 22...	150	540	23	8	14.0	0.140	<0.001	2.68	2.40	560	<50
AUG 03...	140	457	28	10	7.20	0.030	0.001	0.840	0.720	810	80

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT 04...	20	--	<0.5	<0.5	260	--	<3	<3	<5	<5	<5
NOV 17...	30	25	<0.5	<0.5	190	130	<3	<3	<5	<5	<5
JAN 04...	<5	<5	<0.5	<0.5	340	330	<3	<3	<5	<5	<5
FEB 10...	20	23	<0.5	<0.5	260	260	<3	<3	<5	<5	<5
APR 05...	40	33	<0.5	<0.5	140	130	<3	<3	5	<5	<5
MAY 26...	50	37	<0.5	<0.5	190	190	<3	<3	9	6	<5
JUN 22...	30	26	<0.5	<0.5	300	290	<3	<3	<5	<5	<5
AUG 03...	40	43	<0.5	<0.5	230	220	<3	<3	<5	<5	<5

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT 04...	<5	<5	--	490	180	8	<5	34	--	<5	<5
NOV 17...	<5	<5	<5	1500	<50	<5	<5	93	58	<5	<5
JAN 04...	<5	<5	<5	290	<50	<5	<5	42	34	<5	<5
FEB 10...	<5	<5	<5	250	<50	<5	<5	61	55	10	7
APR 05...	<5	650	<5	790	<50	<5	<5	60	32	21	<5
MAY 26...	<5	<5	<5	920	69	<5	<5	120	48	8	5
JUN 22...	<5	<5	<5	830	<50	<5	<5	88	58	<5	<5
AUG 03...	<5	<5	<5	1200	<50	<5	<5	110	40	<10	<10

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 04...	<3	<3.0	620	--	<5	<5	<50	<50	0.010	1
NOV 17...	<3	<3.0	600	--	<5	<5	<100	<100	<0.005	<1
JAN 04...	<3	<3.0	690	680	<5	<5	<50	<50	<0.005	1
FEB 10...	<3	<3.0	740	--	<5	<5	<100	<100	<0.005	<1
APR 05...	<3	<3.0	480	470	<5	<5	380	<50	<0.005	<1
MAY 26...	<3	<3.0	540	540	<5	<5	<50	<50	0.005	<1
JUN 22...	<3	<3.0	670	650	<5	<5	<50	<50	0.010	2
AUG 03...	<3	<3.0	560	550	<5	<5	<50	<50	<0.005	1

05528500 BUFFALO CREEK NEAR WHEELING, IL

LOCATION.--Lat 42°09'05", long 87°57'25", in NE1/4NW1/4 sec.4, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on Buffalo Grove Road, 1.0 mi downstream from unnamed tributary, 2.5 mi west of Wheeling, and at mile 5.0.

DRAINAGE AREA.--19.6 mi^2.

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 658.60 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--37 years, 17.3 ft^3/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 887 ft^3/s, July 22, 1982, gage height, 7.94 ft; no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	0600	*352	*5.98	No other peak greater than base discharge.			

No flow Oct. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.2	11	12	17	e5.7	14	14	22	2.2	25	102
2	9.8	2.8	9.7	e10	16	e6.2	14	9.4	24	1.9	15	73
3	6.7	3.0	8.7	e9.0	14	e10	12	7.2	24	1.6	7.6	43
4	4.6	22	7.5	e8.2	e11	39	11	6.5	21	1.4	198	28
5	3.0	14	6.8	e7.5	e9.8	33	10	6.4	17	1.1	190	19
6	4.2	14	6.5	e9.0	e8.9	36	10	5.5	14	.99	164	24
7	3.7	10	4.6	e30	e8.0	25	6.1	5.4	8.3	.89	120	27
8	3.2	8.0	e4.6	39	e7.3	17	.93	5.4	5.7	.86	57	23
9	1.7	21	e4.5	37	e6.6	15	.54	5.4	6.4	1.7	41	21
10	3.7	43	e4.4	25	e6.2	21	13	5.4	5.0	1.2	28	17
11	1.2	30	e4.4	16	e5.8	32	20	5.4	3.6	1.8	21	14
12	1.9	26	e4.5	e10	e5.6	34	7.3	5.3	11	7.9	18	12
13	1.4	22	e5.0	e13	e6.4	28	6.0	5.3	14	4.5	26	26
14	.19	17	e5.2	e9.0	e7.0	25	5.3	5.3	12	3.0	31	27
15	.00	14	e5.0	e8.5	e6.9	25	4.8	5.0	8.6	1.9	23	21
16	.00	60	e4.7	e7.8	e6.2	22	4.9	6.7	7.0	1.4	17	16
17	3.3	43	e4.7	7.5	e5.9	27	5.6	5.4	5.2	1.2	12	13
18	1.1	27	e4.5	9.6	e5.7	31	6.2	4.1	3.8	15	9.7	10
19	.18	25	e5.2	10	e5.6	27	6.9	8.6	3.0	37	8.3	9.4
20	.20	19	e9.0	8.3	e6.5	24	6.1	6.8	2.8	40	12	11
21	.90	15	e5.2	9.1	e6.4	21	5.1	7.3	3.7	31	9.1	8.5
22	.23	12	e26	7.0	e6.0	19	5.1	5.8	3.7	25	7.4	7.4
23	4.7	10	e20	7.9	e5.6	17	4.6	4.1	4.4	16	6.4	5.7
24	1.1	8.5	e15	8.5	e5.5	15	4.7	2.8	4.5	11	5.7	5.1
25	.46	7.5	e7.7	8.7	e5.5	16	9.8	5.3	8.4	7.2	5.2	4.8
26	3.3	20	e7.0	10	e5.7	15	7.3	2.6	6.4	7.2	5.0	4.6
27	3.2	23	e82	11	e5.8	14	7.0	2.0	4.1	11	4.6	4.3
28	2.8	21	e46	11	e5.6	16	14	1.9	3.5	8.9	13	4.1
29	2.1	17	e27	15	---	15	10	4.7	2.8	14	10	3.7
30	2.1	14	22	17	---	16	9.6	3.5	2.5	37	7.8	3.8
31	1.9	---	15	19	---	15	---	10	---	38	6.0	---
TOTAL	74.96	571.0	393.4	410.6	212.5	661.9	241.87	178.5	262.4	333.84	1103.8	588.4
MEAN	2.42	19.0	12.7	13.2	7.59	21.4	8.06	5.76	8.75	10.8	35.6	19.6
MAX	9.8	60	82	39	17	39	20	14	24	40	198	102
MIN	.00	2.2	4.4	7.0	5.5	5.7	.54	1.9	2.5	.86	4.6	3.7
CFSM	.12	.97	.65	.68	.39	1.09	.41	.29	.45	.55	1.82	1.00
IN.	.14	1.08	.75	.78	.40	1.26	.46	.34	.50	.63	2.09	1.12

CAL YR 1988 TOTAL 5316.35 MEAN 14.5 MAX 211 MIN .00 CFSM .74 IN. 10.09
WTR YR 1989 TOTAL 5033.17 MEAN 13.8 MAX 198 MIN .00 CFSM .70 IN. 9.55

e Estimated

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL

LOCATION.--Lat 42°04'55", long 87°53'25", in SE1/4SE1/4 sec.25, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on right bank 50 ft upstream from Dam No. 2 of Cook County Forest Preserve, 0.3 mi downstream from Lake Avenue Bridge, 1.2 mi upstream from Central Road Bridge, 2.5 mi north of Des Plaines, and at mile 69.3.

DRAINAGE AREA.--360 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.
REVISED RECORDS.--WSP 975: 1942. WDR IL-75-1: Drainage area.
GAGE.--Water-stage recorder and masonry dam. Datum of gage is 626.31 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 8, 1941, nonrecording gage at same site and datum.
REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.
AVERAGE DISCHARGE.--49 years, 272 ft^3/s, 10.26 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,900 ft^3/s, Oct. 1, 1986, gage height, 10.88 ft; no flow for many days in 1944, 1946, and Aug. 7, 8, 1962.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 4, 1938, reached a stage of 9.0 ft, from floodmark, discharge, 5,000 ft^3/s.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	1145	*1,930	*4.35	No other peak greater than base discharge.			

Minimum daily discharge, 33 ft^3/s, Oct. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	95	149	102	205	77	285	237	354	109	205	638
2	97	88	131	88	197	71	287	221	274	89	164	524
3	71	92	114	78	170	79	287	199	255	76	142	362
4	54	236	101	67	85	248	277	179	275	69	1540	297
5	43	201	96	67	e110	350	268	170	224	59	1280	272
6	40	137	92	91	e140	255	252	154	196	58	678	318
7	41	115	88	140	e120	213	231	145	187	58	482	329
8	40	96	74	272	e110	183	201	138	158	57	326	329
9	46	117	69	161	e105	188	177	135	129	57	275	364
10	46	366	62	148	e104	254	160	125	115	62	244	316
11	47	269	57	107	103	372	182	117	101	67	208	292
12	49	220	52	132	99	433	145	112	140	100	179	283
13	52	250	57	118	103	421	132	106	177	70	185	363
14	45	205	79	109	113	436	121	98	166	61	174	371
15	52	171	75	99	113	478	112	110	131	56	157	313
16	58	389	52	87	106	456	107	109	116	53	130	270
17	104	311	49	93	97	457	109	98	110	47	112	238
18	59	172	54	94	91	406	113	78	100	96	100	210
19	37	208	49	94	88	342	109	99	94	290	90	180
20	33	204	61	94	91	315	101	99	88	303	106	160
21	46	176	57	84	91	271	94	89	91	216	91	137
22	43	148	84	84	87	220	90	85	84	212	97	125
23	82	130	145	85	77	185	85	84	80	150	88	110
24	87	114	122	91	76	169	81	83	117	116	82	103
25	77	101	100	96	78	165	158	117	125	111	77	98
26	68	185	81	131	83	158	165	125	92	113	68	93
27	63	254	279	141	81	162	148	127	128	148	65	84
28	66	212	276	130	84	200	292	101	198	128	147	80
29	75	181	164	180	---	277	330	128	173	139	141	80
30	80	160	121	205	---	304	264	149	135	327	108	80
31	86	---	111	202	---	296	---	225	---	267	92	---
TOTAL	1856	5603	3101	3670	3007	8441	5363	4042	4613	3764	7833	7419
MEAN	59.9	187	100	118	107	272	179	130	154	121	253	247
MAX	104	389	279	272	205	478	330	237	354	327	1540	638
MIN	33	88	49	67	76	71	81	78	80	47	65	80
CFSM	.17	.52	.28	.33	.30	.76	.50	.36	.43	.34	.70	.69
IN.	.19	.58	.32	.38	.31	.87	.55	.42	.48	.39	.81	.77

CAL YR 1988 TOTAL 104167 MEAN 285 MAX 1780 MIN 33 CFSM .79 IN. 10.76
WTR YR 1989 TOTAL 58712 MEAN 161 MAX 1540 MIN 33 CFSM .45 IN. 6.07

e Estimated

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
13...	1030	17002	17002	51	1160	7.70	9.5	14	9.6	23	190
NOV											
10...	1030	17002	17002	363	776	7.00	8.5	12	8.0	29	K100
JAN											
06...	1030	17002	17002	92	1650	7.50	0.5	8.1	11.6	29	280
FEB											
09...	1030	17002	17002	109	1500	7.90	0.5	5.3	11.5	31	K100
APR											
07...	1130	17002	17002	237	1140	7.70	8.5	3.7	9.7	40	180
MAY											
11...	1130	17002	17002	114	1230	8.00	14.5	18	10.4	37	K70
JUN											
06...	1200	17002	17002	198	1110	--	22.0	14	--	34	390
JUL											
21...	1030	17002	17002	214	848	7.70	20.0	40	7.3	39	K1300

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT											
13...	310	310	78	78	28	27	120	120	11	11	110
NOV											
10...	220	220	58	55	22	21	74	71	7.0	6.3	78
JAN											
06...	360	360	86	85	36	36	180	180	8.8	8.7	160
FEB											
09...	400	400	93	91	42	41	130	120	8.0	7.2	180
APR											
07...	410	410	96	93	45	43	86	85	4.9	4.7	160
MAY											
11...	390	390	92	88	44	42	110	110	4.8	6.2	160
JUN											
06...	360	360	83	81	39	38	97	97	6.2	5.4	130
JUL											
21...	230	230	57	53	25	23	87	84	7.6	7.2	79

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT											
13...	160	519	14	4	9.20	0.240	0.002	1.69	1.56	450	<50
NOV											
10...	100	332	35	10	4.10	0.230	<0.001	0.600	0.570	1200	150
JAN											
06...	290	760	6	4	6.50	0.650	0.002	0.910	0.860	160	<50
FEB											
09...	200	639	9	6	6.80	0.320	0.002	0.790	0.770	130	80
APR											
07...	140	534	38	8	6.80	0.390	0.003	0.580	0.470	1200	370
MAY											
11...	170	568	28	11	6.10	0.070	0.002	0.930	0.780	1300	720
JUN											
06...	160	510	40	16	3.80	0.340	--	0.580	0.430	1000	310
JUL											
21...	120	372	73	15	4.00	0.240	0.005	0.740	0.590	1500	80

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT											
13...	20	17	<0.5	<0.5	340	340	<3	<3	<5	<5	<5
NOV											
10...	20	17	<0.5	<0.5	190	170	<3	<3	<5	<5	<5
JAN											
06...	5	<5	<0.5	<0.5	280	280	<3	<3	<5	<5	<5
FEB											
09...	30	29	<0.5	<0.5	250	240	<3	<3	<5	5	<5
APR											
07...	40	34	<0.5	<0.5	170	160	<3	<3	6	<5	<5
MAY											
11...	40	33	<2.0	<1	250	240	<3	<3	7	<5	<5
JUN											
06...	50	45	<0.5	<0.5	210	210	<3	<3	5	<5	<5
JUL											
21...	40	30	<0.5	<0.5	190	180	<3	<3	<5	<5	<5

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT											
13...	<5	<5	<5	710	<50	<5	<5	60	37	<5	<5
NOV											
10...	<5	<5	<5	1400	70	<5	7	69	45	<5	<5
JAN											
06...	<5	<5	<5	270	<50	<5	<5	52	46	<5	<5
FEB											
09...	<5	<5	<5	240	<50	<5	<5	52	48	<5	<5
APR											
07...	<5	<5	<5	1300	<50	<5	<5	96	64	<5	<5
MAY											
11...	<5	6	<5	970	<50	<5	<5	100	56	<5	<5
JUN											
06...	<5	<5	<5	1200	<50	<5	<5	130	75	7	<5
JUL											
21...	<5	<5	<5	2100	<50	<5	<5	120	42	13	10

DATE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT										
13...	<3	<3.0	1100	1100	<5	<5	<100	<100	<0.005	<1
NOV										
10...	<3	<3.0	600	580	<5	<5	170	140	<0.005	1
JAN										
06...	<3	<3.0	860	850	<5	<5	<50	<50	<0.005	1
FEB										
09...	<3	<3.0	900	840	<5	<5	<50	<50	<0.005	<1
APR										
07...	<3	<3.0	600	580	<5	<5	<50	<50	<0.005	1
MAY										
11...	<3	<3.0	780	750	<5	<5	<50	<50	<0.005	<1
JUN										
06...	<3	<3.0	590	580	<5	<5	<50	<50	<0.005	2
JUL										
21...	<3	<3.0	610	580	<5	<5	<100	<100	<0.005	1

05529500 MC DONALD CREEK NEAR MOUNT PROSPECT, IL

LOCATION.--Lat 42°05'43", long 87°54'46", in SW1/4SE1/4 sec.23, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Camp McDonald Road, 2.5 mi northeast of Mount Prospect and at mile 2.0.

DRAINAGE AREA.--7.93 mi^2.

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WSP 1915: 1958. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 636.12 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to May 9, 1978, at site 55 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--37 years, 5.97 ft^3/s, 10.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 806 ft^3/s, Aug. 14, 1987, gage height, 8.08 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	1445	*232	*6.45	No other peak greater than base discharge.			

No flow July 10, 15-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.18	.37	2.1	2.6	2.3	e1.2	1.5	1.6	23	.25	3.5	68
2	e3.0	.41	1.8	2.4	1.7	1.4	1.5	2.8	5.8	.26	3.8	17
3	e.80	.43	1.8	2.2	1.5	3.7	1.9	3.6	12	.28	2.4	9.0
4	e.50	37	1.7	1.8	1.5	30	1.4	2.2	5.8	.32	159	6.3
5	e.40	11	1.6	2.1	e1.4	20	1.4	2.7	2.6	.20	92	5.0
6	e.32	4.4	1.7	5.4	e1.3	7.5	1.3	1.5	1.7	.19	26	16
7	e.25	2.8	1.4	11	e1.2	4.0	1.2	1.1	1.3	.16	15	8.0
8	e.22	2.8	1.2	12	e1.1	3.3	1.5	1.5	.86	.01	10	10
9	e.21	7.2	e1.2	7.0	e1.0	5.1	1.6	1.5	.68	.05	8.6	20
10	e.20	32	e1.1	3.8	e.98	7.0	1.2	.85	.56	.00	20	8.4
11	e.18	4.9	e1.1	2.6	e.92	6.2	2.2	1.1	.38	.08	18	4.7
12	e.15	7.8	e1.2	4.2	e.88	4.3	2.7	1.5	9.4	5.4	15	3.3
13	.12	9.0	e1.2	2.6	e.82	3.8	2.8	1.1	3.0	.72	12	18
14	.14	2.9	e1.3	2.7	e.86	6.2	1.7	1.0	1.2	.23	12	8.0
15	.19	2.2	1.4	2.2	e1.0	6.9	1.3	1.1	.80	.00	10	3.7
16	.19	45	1.6	1.9	e.94	3.7	.87	.90	.66	.00	9.4	2.7
17	13	11	1.6	1.5	e.92	13	1.4	1.2	.55	.00	8.8	1.8
18	6.3	4.6	2.0	1.4	e.90	14	1.6	.98	.45	8.0	7.8	1.6
19	.86	13	2.8	1.3	e.89	5.9	1.5	5.4	.41	30	6.1	1.9
20	.62	5.4	2.2	1.3	e.92	5.1	1.1	3.2	.40	19	12	2.5
21	.76	3.3	1.2	1.3	e.96	3.9	2.0	1.4	.39	5.7	7.2	.74
22	.75	3.1	6.7	1.2	e.92	2.9	1.1	1.2	.37	2.1	9.0	.61
23	8.0	2.4	13	1.1	e.92	2.7	.67	1.3	.40	.76	7.5	1.1
24	2.0	2.1	3.2	1.0	e.92	2.4	.68	1.2	.33	.44	6.7	.34
25	.76	2.1	2.1	1.4	e.91	2.0	3.2	5.4	.34	1.7	6.5	1.2
26	.76	15	2.0	3.3	e.91	2.0	1.7	2.8	.54	1.9	5.7	.46
27	.77	8.7	32	1.8	e.91	1.8	2.4	1.5	.23	.59	2.8	.29
28	.55	4.0	12	1.7	e.91	4.1	12	.98	.22	.42	15	1.4
29	.43	3.2	5.1	5.9	---	3.5	3.9	6.8	.23	[illegible].8	5.8	2.4
30	.42	2.4	4.1	3.6	---	2.3	2.3	2.6	.26	34	3.4	.38
31	.41	---	3.1	2.9	---	1.9	---	17	---	5.4	3.2	---
TOTAL	43.44	250.51	116.5	97.2	30.39	182.4	61.62	79.01	74.86	122.96	524.2	224.82
MEAN	1.40	8.35	3.76	3.14	1.09	5.88	2.05	2.55	2.50	3.97	16.9	7.49
MAX	13	45	32	12	2.3	30	12	17	23	34	159	68
MIN	.12	.37	1.1	1.0	.82	1.2	.67	.85	.22	.00	2.4	.29
CFSM	.18	1.05	.47	.40	.14	.74	.26	.32	.31	.50	2.13	.95
IN.	.20	1.18	.55	.46	.14	.86	.29	.37	.35	.58	2.46	1.05

CAL YR 1988 TOTAL 1551.98 MEAN 4.24 MAX 104 MIN .00 CFSM .53 IN. 7.28
WTR YR 1989 TOTAL 1807.91 MEAN 4.95 MAX 159 MIN .00 CFSM .62 IN. 8.48

e Estimated

05530000 WELLER CREEK AT DES PLAINES, IL

LOCATION.--Lat 42°02'58", long 87°55'05", in NW1/4NW1/4 sec.18, T.41 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank 10 ft upstream from bridge on State Highway 58 (Golf Road) in Des Plaines, 2 mi west of U.S. Highway 45, and at mile 3.0.

DRAINAGE AREA.--13.2 mi^2.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 1915: 1957-60. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 634.02 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to Sept. 9, 1968, at site 90 ft downstream and at datum 1.00 ft higher. Sept. 9, 1968, to Sept. 10, 1970, at present site at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Prior to Nov. 15, 1958, effluent from Arlington Heights sewage treatment plant entered Weller Creek above station.

AVERAGE DISCHARGE.--39 years, 10.6 ft^3/s, 10.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft^3/s, June 10, 1967, gage height, 15.09 ft, present datum; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1530	628	5.84	Sept. 1	unknown	550	5.82
Aug. 4	unknown	*1,170	*11.39				

Minimum daily discharge, 0.05 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	3.9	1.3	2.4	.75	e.25	1.7	.75	e40	.37	2.4	e85
2	8.8	.93	1.3	1.6	e.55	e.23	1.0	1.2	e13	.37	1.6	e60
3	1.0	.93	.70	4.7	e.51	e1.0	1.2	.99	e17	.33	.85	e30
4	.54	133	.60	e1.4	e.48	e9.5	.91	.77	e6.0	.34	e350	e18
5	.42	27	.78	e1.2	e.45	e4.0	.85	1.4	e2.6	.29	e200	e3.5
6	.41	15	.55	12	e.40	e2.5	.68	1.1	e2.2	.32	e100	24
7	.48	5.2	.62	49	e.37	e2.0	.60	1.0	1.5	.33	e40	5.5
8	.47	6.6	.59	17	e.35	e1.8	.76	.96	.83	.28	e12	4.9
9	.40	27	1.3	9.5	e.33	e2.3	.78	1.1	.75	.91	e7.0	17
10	.25	38	1.1	6.4	e.32	e3.0	.60	.97	.79	.38	e5.0	5.9
11	.25	10	e1.0	7.6	e.45	e4.7	.60	.91	.61	7.4	e33	4.3
12	.20	19	e.90	4.3	e1.3	e4.3	.74	1.1	9.8	26	e20	3.9
13	.30	13	e2.5	3.6	e.90	e3.0	.58	1.0	2.1	1.3	e10	16
14	.28	7.7	1.5	.66	e.58	e4.0	.58	.70	.87	.56	e6.0	5.2
15	.25	9.0	e1.3	.43	e.50	e4.7	.52	.84	.60	.37	e3.4	3.8
16	.26	103	e1.1	.77	e.45	e3.8	.71	.85	.60	.37	e2.6	3.6
17	159	13	e1.0	.28	e.40	e8.0	1.0	1.0	.60	.37	e1.9	3.2
18	58	6.9	e.90	.28	e.35	e7.0	1.5	1.1	.48	72	e1.6	2.7
19	12	24	3.7	.28	e.33	e4.0	.84	17	.43	69	e1.5	2.6
20	6.2	6.0	5.7	.39	e.60	e2.7	.60	6.7	.47	53	e1.4	2.3
21	7.7	3.5	3.4	.47	e.55	e2.0	.60	2.0	.31	3.0	e1.3	2.2
22	3.2	1.4	23	.33	e.45	e1.8	.60	.77	.32	1.3	e1.2	2.2
23	25	1.7	13	.28	e.40	e1.6	.55	.54	.40	.85	e1.2	2.1
24	6.9	2.1	2.3	.28	e.35	e1.3	.48	.54	.44	.75	e1.2	2.0
25	2.7	1.2	1.5	.77	e.40	e1.1	8.2	7.0	.49	10	e1.1	2.2
26	2.3	25	1.1	.88	e.35	e1.0	1.4	2.0	.41	10	e1.0	2.0
27	1.2	9.4	92	.42	e.28	e1.5	1.2	.81	.37	1.4	e.95	2.1
28	2.0	2.7	14	.96	e.27	e2.0	33	.74	.50	.93	e9.0	1.5
29	1.8	1.9	e6.0	4.5	---	e2.9	3.5	4.5	.37	47	e3.5	1.5
30	1.6	1.5	e3.5	1.6	---	1.6	.87	1.3	.37	82	e2.5	1.8
31	8.0	---	3.0	.98	---	2.8	---	e95	---	5.4	e2.0	---
TOTAL	311.96	519.56	191.24	135.26	13.42	92.38	67.15	156.64	105.21	396.92	825.21	321.0
MEAN	10.1	17.3	6.17	4.36	.48	2.98	2.24	5.05	3.51	12.8	26.6	10.7
MAX	159	133	92	49	1.3	9.5	33	95	40	82	350	85
MIN	.05	.93	.55	.28	.27	.23	.48	.54	.31	.28	.86	1.5
CFSM	.76	1.31	.47	.33	.04	.23	.17	.38	.27	.97	2.02	.81
IN.	.88	1.46	.54	.38	.04	.26	.19	.44	.30	1.12	2.33	.90

CAL YR 1988 TOTAL 2845.75 MEAN 7.78 MAX 221 MIN .03 CFSM .59 IN. 8.02
WTR YR 1989 TOTAL 3135.95 MEAN 8.59 MAX 350 MIN .05 CFSM .65 IN. 8.84

e Estimated

05530590 DES PLAINES RIVER NEAR SCHILLER PARK, IL

LOCATION.--Lat 41°57'11", long 87°51'15", in SE1/4 sec.15, T.40 N., R.12 E., Cook County, Hydrologic Unit 07120004, at bridge on State Highway 19 (Irving Park Road), 0.3 mi east of Schiller Park, 3.0 mi downstream from Willow Creek, and at mile 56.9.

DRAINAGE AREA.--444 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1967-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
06...	0930	17002	17002	74	1060	7.80	12.0	23	7.8	39	K1700
NOV											
17...	0945	17002	17002	776	809	8.00	8.0	70	8.8	31	K8000
JAN											
19...	1330	17002	17002	212	1350	8.20	4.0	4.2	12.1	26	1400
FEB											
15...	1300	17002	17002	174	2010	7.70	1.5	2.2	11.4	69	4500
MAR											
28...	1300	17002	17002	361	1430	7.90	14.0	12	7.3	37	K21000
MAY											
10...	1230	17002	17002	204	1250	8.10	13.0	14	8.6	30	K2000
JUN											
29...	1230	17002	17002	190	1080	7.50	21.5	8.2	5.1	34	K1000
JUL											
19...	1230	17002	17002	1400	588	7.90	20.5	30	5.4	42	K60000

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
06...	270	100	70	68	26	25	110	110	11	10	172
NOV											
17...	260	130	67	63	28	26	65	65	5.3	5.0	132
JAN											
19...	340	140	83	81	34	33	130	130	8.6	8.4	204
FEB											
15...	340	150	85	83	33	33	260	260	10	10	192
MAR											
28...	370	170	93	87	40	37	150	150	6.5	5.6	200
MAY											
10...	370	160	90	85	40	38	120	110	7.2	7.8	208
JUN											
29...	310	120	75	72	33	31	120	120	9.0	7.8	192
JUL											
19...	140	48	40	36	16	13	63	62	6.7	6.0	96

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05530590 DES PLAINES RIVER NEAR SCHILLER PARK, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 06...	96	140	1.1	554	40	9	6.40	0.200	0.003	1.5	1.7
NOV 17...	82	120	0.4	438	67	8	2.90	0.270	0.004	1.1	1.4
JAN 19...	140	210	0.7	726	20	7	5.60	0.360	0.007	1.6	2.0
FEB 15...	150	440	0.8	1090	14	6	6.60	0.660	0.003	2.2	2.9
MAR 28...	140	250	0.5	791	40	12	5.00	0.490	0.010	1.0	1.5
MAY 10...	140	180	0.6	691	41	12	5.80	0.410	0.013	1.6	2.0
JUN 29...	130	160	0.8	632	83	17	6.90	0.280	0.004	1.7	2.0
JUL 19...	52	92	0.4	319	89	19	2.60	0.470	0.016	1.3	1.8

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)
OCT 06...	8.1	1.13	0.960	970	<50	4	30	20	<0.5	<0.5
NOV 17...	4.3	0.480	0.360	2500	380	2	40	26	<0.5	<0.5
JAN 19...	7.6	0.960	0.920	320	60	2	30	31	<0.5	<0.5
FEB 15...	9.5	1.24	1.11	250	80	1	40	34	<0.5	<0.5
MAR 28...	6.5	0.640	0.480	1000	160	2	50	39	<0.5	<0.5
MAY 10...	7.8	1.02	0.820	1300	610	2	40	33	<1.0	<1
JUN 29...	8.9	0.940	0.740	1700	70	3	50	32	<0.5	<0.5
JUL 19...	4.4	0.570	0.410	2000	70	2	40	21	<0.5	<0.5

05530590 DES PLAINES RIVER NEAR SCHILLER PARK, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT										
06...	420	410	<3	<3	<5	<5	<5	<5	10	<5
NOV										
17...	150	140	<3	<3	5	<5	<5	<5	6	<5
JAN										
19...	330	330	<3	<3	9	6	<5	<5	9	6
FEB										
15...	320	320	4	<3	6	<5	<5	<5	7	<5
MAR										
28...	220	210	<3	<3	9	<5	<5	<5	18	5
MAY										
10...	310	300	<3	<3	9	<5	<5	<5	7	<5
JUN										
29...	370	--	<3	<3	<5	<5	<5	<5	6	<5
JUL										
19...	160	150	<3	--	8	<5	<5	<5	12	<5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT										
06...	1500	<50	6	<5	78	35	<0.05	16	10	<3
NOV										
17...	2700	62	13	<5	100	48	0.06	10	6	<3
JAN										
19...	540	<50	<5	<5	84	74	0.06	16	14	<3
FEB										
15...	430	<50	<5	<5	81	74	<0.05	13	13	<3
MAR										
28...	1500	<50	12	<5	150	110	<0.05	11	6	<3
MAY										
10...	1300	<50	5	<5	110	64	<0.05	10	5	<3
JUN										
29...	2400	<50	9	<5	120	51	<0.05	13	9	<3
JUL										
19...	2800	<50	10	<5	99	29	0.05	10	5	<3

05530590 DES PLAINES RIVER NEAR SCHILLER PARK IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT										
06...	<3.0	830	810	<5	<5	100	<100	<0.005	5	<1
NOV										
17...	<3.0	450	440	<5	<5	110	<100	<0.005	6	<1
JAN										
19...	<3.0	750	740	<5	<5	<100	<100	0.005	6	1
FEB										
15...	<3.0	820	820	<5	<5	<100	<100	<0.005	7	1
MAR										
28...	<3.0	630	610	<5	<5	<100	<50	<0.005	9	<1
MAY										
10...	<3.0	730	710	<5	<5	<50	<50	<0.005	9	1
JUN										
29...	<3.0	720	720	<5	<5	<100	<100	<0.005	7	--
JUL										
19...	<3.0	360	350	7	<5	<100	<50	<0.005	7	--

05530990 SALT CREEK AT ROLLING MEADOWS, IL

LOCATION.--Lat 42°03'37", long 88°00'59", in SW1/4NW1/4 sec.8, T.41 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Algonquin Road in Rolling Meadows, 0.25 mi downstream from Arlington Heights Branch Salt Creek, and at mile 35.6.

DRAINAGE AREA.--30.5 mi^2.

PERIOD OF RECORD.--October 1973 to current year. August 1950 to September 1971, October 1971 to September 1972 (annual maximum discharge and gage height only), October 1972 to September 1973 at site 0.9 mi downstream, published as Salt Creek near Arlington Heights. Records may not be equivalent.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 686.40 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Gage-height telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--16 years, 29.6 ft^3/s, 13.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s, Aug. 14, 1987, gage height, 14.03 ft; no flow Jan. 12 to Feb. 8, 1977, result of freezeup, and Aug. 20, 25, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	0715	*1,110	*11.54	Sept. 1	unknown	636	8.49

Minimum daily discharge, 0.82 ft^3/s, Oct. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	2.8	19	15	32	e8.0	14	8.9	59	e2.5	23	e200
2	19	2.6	16	14	27	e8.0	14	7.7	28	e2.2	15	e145
3	6.2	2.3	15	e13	21	e17	13	6.8	36	e1.8	11	e85
4	4.1	63	14	e12	19	86	12	6.1	23	e1.6	763	e54
5	3.0	37	13	e10	e17	46	11	7.6	14	e1.3	503	33
6	2.3	26	12	19	e15	31	10	5.9	9.7	e1.2	213	58
7	2.2	18	10	60	e14	24	9.6	5.4	6.7	e1.1	89	41
8	1.6	14	9.5	96	e13	20	8.6	4.7	5.8	e1.0	55	33
9	1.4	33	e8.4	110	e12	22	7.9	4.3	3.8	e2.0	44	39
10	1.3	93	e7.0	69	e12	38	7.1	3.6	3.0	e25	42	31
11	1.2	38	e6.0	31	e11	44	6.7	3.1	2.7	e15	70	23
12	1.2	44	e5.5	28	e12	40	6.6	2.8	38	e8.0	52	20
13	1.2	43	e6.0	20	e14	33	6.6	2.6	20	3.9	39	54
14	1.0	27	e6.4	18	e13	37	6.2	2.4	12	2.4	41	39
15	.82	24	e5.5	12	e12	41	6.0	2.2	9.4	1.7	35	27
16	.85	167	e5.0	14	e11	32	6.3	2.4	7.5	1.1	e30	21
17	70	48	e4.8	8.9	e10	54	8.1	2.3	5.3	.85	e25	18
18	35	35	e4.6	8.2	e9.5	55	8.9	2.1	4.1	49	e20	15
19	15	49	e5.0	8.3	e10	38	8.0	25	3.3	105	e15	13
20	12	34	9.6	8.7	e9.5	33	7.5	18	e2.8	83	e13	12
21	15	24	7.0	10	e10	28	6.3	11	e2.5	39	13	10
22	11	19	21	11	e9.5	24	5.8	8.0	e2.2	23	11	9.6
23	30	17	39	6.8	e9.0	21	5.3	6.0	e4.5	15	9.2	8.2
24	20	16	24	6.6	e8.5	19	4.7	4.3	e4.0	11	8.3	7.5
25	15	14	18	9.6	e9.0	18	14	19	e3.5	11	7.2	6.8
26	12	51	14	21	e9.5	18	8.4	8.6	e15	12	6.2	6.4
27	10	46	95	17	e9.0	19	7.3	5.1	e8.0	12	5.7	5.7
28	9.2	33	51	16	e8.5	30	35	3.7	e5.0	12	23	5.7
29	7.5	26	33	37	---	29	16	15	e3.5	40	12	5.4
30	7.7	23	25	38	---	22	11	8.2	e3.0	122	8.7	5.1
31	4.6	---	18	35	---	17	---	32	---	39	8.8	---
TOTAL	329.17	1069.7	527.3	783.1	367.0	952.0	291.9	244.8	345.3	645.65	2211.1	1031.4
MEAN	10.6	35.7	17.0	25.3	13.1	30.7	9.73	7.90	11.5	20.8	71.3	34.4
MAX	70	167	95	110	32	86	35	32	59	122	763	200
MIN	.82	2.3	4.6	6.6	8.5	8.0	4.7	2.1	2.2	.85	5.7	5.1
CFSM	.35	1.17	.56	.83	.43	1.01	.32	.26	.38	.68	2.34	1.13
IN.	.40	1.30	.64	.96	.45	1.16	.36	.30	.42	.79	2.70	1.26

CAL YR 1988 TOTAL 9535.06 MEAN 26.1 MAX 396 MIN .37 CFSM .85 IN. 11.63
WTR YR 1989 TOTAL 8798.42 MEAN 24.1 MAX 763 MIN .82 CFSM .79 IN. 10.73

e Estimated

05531300 SALT CREEK AT ELMHURST, IL

LOCATION.--Lat 41°53'20", long 87°57'41", in NE1/4NE1/4 sec.10, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Highway 83 in Elmhurst and at mile 20.3.

DRAINAGE AREA.--91.2 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1961-80. June to September 1989.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 655.00 ft above National Geodetic Vertical Datum of 1929. Prior to June 1, 1989, at datum 5.49 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,230 ft^3/s, Aug. 27, 1972, gage height, 7.27 ft; minimum, 18 ft^3/s, July 1, 1989.

EXTREMES FOR PERIOD JUNE TO SEPTEMBER OF CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	0535	550	10.10	Aug. 6	0250	*1,580	*13.56
July 21	0420	569	10.20	Sept. 2	1255	665	10.68

Minimum discharge, 18 ft^3/s, July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	444	29	193	584
2	---	---	---	---	---	---	---	---	314	46	125	636
3	---	---	---	---	---	---	---	---	223	35	92	467
4	---	---	---	---	---	---	---	---	184	31	504	224
5	---	---	---	---	---	---	---	---	136	31	1270	152
6	---	---	---	---	---	---	---	---	100	34	1380	229
7	---	---	---	---	---	---	---	---	76	33	820	232
8	---	---	---	---	---	---	---	---	63	32	402	180
9	---	---	---	---	---	---	---	---	55	32	219	225
10	---	---	---	---	---	---	---	---	47	34	157	200
11	---	---	---	---	---	---	---	---	41	39	131	148
12	---	---	---	---	---	---	---	---	90	59	142	115
13	---	---	---	---	---	---	---	---	118	57	140	145
14	---	---	---	---	---	---	---	---	96	48	130	154
15	---	---	---	---	---	---	---	---	72	44	115	148
16	---	---	---	---	---	---	---	---	59	39	99	108
17	---	---	---	---	---	---	---	---	51	37	87	93
18	---	---	---	---	---	---	---	---	59	93	81	84
19	---	---	---	---	---	---	---	---	53	282	73	e72
20	---	---	---	---	---	---	---	---	46	388	98	64
21	---	---	---	---	---	---	---	---	39	365	82	57
22	---	---	---	---	---	---	---	---	42	226	76	54
23	---	---	---	---	---	---	---	---	46	139	65	51
24	---	---	---	---	---	---	---	---	39	101	62	47
25	---	---	---	---	---	---	---	---	35	81	49	41
26	---	---	---	---	---	---	---	---	39	119	41	41
27	---	---	---	---	---	---	---	---	38	126	43	39
28	---	---	---	---	---	---	---	---	36	105	83	39
29	---	---	---	---	---	---	---	---	35	109	89	41
30	---	---	---	---	---	---	---	---	31	296	72	36
31	---	---	---	---	---	---	---	---	---	304	61	---
TOTAL	---	---	---	---	---	---	---	---	2707	3394	6981	4706
MEAN	---	---	---	---	---	---	---	---	90.2	109	225	157
MAX	---	---	---	---	---	---	---	---	444	388	1380	636
MIN	---	---	---	---	---	---	---	---	31	29	41	36
CFSM	---	---	---	---	---	---	---	---	.99	1.20	2.47	1.72
IN.	---	---	---	---	---	---	---	---	1.10	1.38	2.85	1.92

e Estimated

05531500 SALT CREEK AT WESTERN SPRINGS, IL

LOCATION.--Lat 41°49'35", long 87°54'00", in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Wolf Road, in Cook County Forest Preserve, 0.5 mi north of Western Springs, and at mile 8.8.

DRAINAGE AREA.--115 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 1915: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.93 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Occasional regulation by dam upstream from station.

AVERAGE DISCHARGE.--44 years, 116 ft^3/s, 13.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft^3/s, Aug. 17, 1987, gage height, 10.54 ft; minimum, 0.4 ft^3/s, July 13, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 6	2115	*1,360	*7.82	Sept. 1	1130	1,210	7.53

Minimum daily discharge, 34 ft^3/s, July 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	57	117	119	129	50	117	82	615	40	269	849
2	95	55	99	99	116	49	102	77	472	92	156	726
3	92	51	89	94	102	60	107	73	373	79	111	635
4	78	248	85	84	94	209	101	65	282	48	440	337
5	64	290	82	82	84	260	97	84	198	41	985	208
6	60	242	79	119	e80	226	90	70	135	41	1340	361
7	51	174	75	181	e75	158	86	62	102	41	1150	349
8	48	131	72	357	e70	121	84	58	81	38	612	264
9	46	145	70	305	e65	107	82	57	77	34	330	282
10	45	358	69	234	e65	137	77	53	64	40	207	284
11	49	305	66	173	e70	170	73	50	58	44	155	204
12	e42	273	67	148	e75	188	72	47	129	80	157	146
13	e44	291	65	129	e80	176	71	43	159	60	160	189
14	e45	229	63	107	e75	164	69	41	128	55	150	192
15	e44	241	e62	95	e70	199	69	42	97	49	135	188
16	e105	538	e60	88	e65	183	67	48	81	47	112	139
17	e300	477	e58	83	e60	191	69	45	72	39	99	110
18	e640	384	e58	78	e56	273	80	44	63	90	94	100
19	e350	308	61	75	59	250	81	82	58	470	86	90
20	e140	260	65	74	61	206	76	140	58	583	124	81
21	e103	207	66	73	64	167	72	111	55	588	97	78
22	e94	158	96	71	64	139	72	86	49	355	98	74
23	124	130	219	70	58	119	68	74	56	195	82	73
24	137	135	169	70	57	106	65	67	55	132	77	71
25	115	122	130	73	54	100	65	92	46	104	68	64
26	93	163	102	82	55	92	74	85	81	131	63	65
27	77	227	229	89	55	97	74	74	65	143	63	62
28	71	215	363	88	54	159	106	62	53	124	94	60
29	64	175	327	110	---	230	117	101	52	104	108	62
30	57	140	229	136	---	169	103	94	44	428	91	62
31	55	---	153	137	---	139	---	89	---	385	78	---
TOTAL	3380	6729	3545	3723	2012	4894	2486	2198	3858	4700	7791	6405
MEAN	109	224	114	120	71.9	158	82.9	70.9	129	152	251	213
MAX	640	538	363	357	129	273	117	140	615	588	1340	849
MIN	42	51	58	70	54	49	65	41	44	34	63	60
CFSM	.95	1.95	.99	1.04	.62	1.37	.72	.62	1.12	1.32	2.19	1.86
IN.	1.09	2.18	1.15	1.20	.65	1.58	.80	.71	1.25	1.52	2.52	2.07

CAL YR 1988 TOTAL 50243 MEAN 137 MAX 996 MIN 37 CFSM 1.19 IN. 16.25
WTR YR 1989 TOTAL 51721 MEAN 142 MAX 1340 MIN 34 CFSM 1.23 IN. 16.73

e Estimated

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
25...	1300	17002	17002	120	1000	8.00	9.0	8.1	9.8	20	K1200
NOV											
17...	1300	17002	17002	476	807	7.30	7.5	54	10.2	29	2100
JAN											
19...	0930	17002	17002	72	1620	8.30	4.5	6.8	10.8	26	290
FEB											
15...	1000	17002	17002	69	2310	7.60	3.0	12	10.8	34	K680
MAR											
28...	0930	17002	17002	123	2060	7.80	15.0	22	7.3	34	K1900
MAY											
10...	0830	17002	17002	54	1750	7.90	12.5	72	7.5	33	340
JUN											
29...	0930	17002	17002	54	1350	7.40	21.5	56	4.5	32	K1100
JUL											
19...	0900	17002	17002	505	719	7 90	20.5	36	6.1	51	K91000

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)
OCT											
25...	240	110	62	57	25	23	110	100	8.3	7.6	132
NOV											
17...	240	100	59	58	24	24	68	70	5.2	4.9	140
JAN											
19...	260	47	90	62	37	25	170	120	10	6.9	212
FEB											
15...	360	140	89	88	38	35	300	300	12	12	224
MAR											
28...	380	180	96	92	37	36	290	280	7.5	7.3	196
MAY											
10...	390	170	99	93	42	39	210	200	12	11	220
JUN											
29...	350	150	90	82	38	35	170	170	15	13	196
JUL											
19...	160	68	48	39	21	16	83	80	7.9	6.6	96

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
25...	87	150	0.6	509	41	12	5.40	0.450	0.008	1.1	1.6
NOV											
17...	83	110	0.3	437	73	12	3.60	0.430	0.001	1.3	1.7
JAN											
19...	140	290	0.7	778	50	4	7.70	1.50	0.037	1.6	3.1
FEB											
15...	150	500	0.8	1220	41	10	7.90	1.50	0.007	1.4	2.9
MAR											
28...	130	460	0.5	1130	88	19	4.60	1.20	0.021	1.1	2.3
MAY											
10...	150	310	0.7	947	75	16	9.60	1.10	0.021	1.7	2.8
JUN											
29...	140	240	1.0	795	83	16	10.0	0.940	0.011	1.7	2.6
JUL											
19...	62	120	0.4	383	185	44	3.90	0.740	0.025	1.9	2.6

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT										
25...	7.0	1.42	1.24	1100	90	2	20	8	<0.5	<0.5
NOV										
17...	5.3	0.720	0.560	1600	170	1	30	22	<0.5	<0.5
JAN										
19...	11	1.51	1.32	900	60	2	40	24	<0.5	<0.5
FEB										
15...	11	2.02	1.86	610	80	1	40	36	<0.5	<0.5
MAR										
28...	6.9	0.840	0.680	1100	180	1	60	48	<0.5	<0.5
MAY										
10...	12	1.64	1.50	2200	700	3	50	37	<2.0	<2
JUN										
29...	13	2.20	1.88	2900	80	<1	50	36	<0.5	<0.5
JUL										
19...	6.5	1.05	0.600	3200	80	2	50	20	<0.5	<0.5

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 25...	310	290	<3	<3	<5	6	<5	<5	5	<5
NOV 17...	110	--	<3	<3	<5	<5	<5	<5	<5	<5
JAN 19...	330	230	<3	<3	11	<5	<5	<5	8	<5
FEB 15...	340	340	<3	<3	8	5	<5	<5	8	<5
MAR 28...	210	200	<3	<3	6	<5	<5	<5	8	<5
MAY 10...	350	330	<3	<3	36	<5	<5	<5	13	5
JUN 29...	450	420	<3	--	81	<5	<5	<5	16	<5
JUL 19...	160	150	<3	--	45	30	<5	<5	24	<5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT 25...	1400	52	<5	<5	42	25	<0.05	6	14	<3
NOV 17...	2200	62	8	<5	55	24	<0.05	<5	<5	<3
JAN 19...	1500	<50	7	<5	87	46	0.09	12	6	<3
FEB 15...	1000	<50	<5	<5	82	66	<0.05	10	10	<3
MAR 28...	1400	<50	6	<5	110	79	<0.05	11	<5	<3
MAY 10...	2800	<50	9	<5	100	50	<0.05	40	8	<3
JUN 29...	2900	<50	14	<5	120	46	<0.05	40	11	<3
JUL 19...	5100	<50	19	<5	130	36	<0.05	16	13	<3

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT										
25...	<3.0	520	490	<5	<5	<50	<50	<0.005	7	<1
NOV										
17...	<3.0	320	320	<5	<5	<50	<50	<0.005	6	<1
JAN										
19...	<3.0	780	540	<5	<5	<100	<100	0.006	7	1
FEB										
15...	<3.0	890	890	<5	<5	<50	<50	0.010	7	1
MAR										
28...	<3.0	670	650	<5	<5	<50	<50	<0.005	9	2
MAY										
10...	<3.0	960	920	<5	<5	<100	<100	<0.005	10	1
JUN										
29...	<3.0	970	930	<5	<5	<100	--	<0.005	10	--
JUL										
19...	<3.0	410	380	7	<5	130	<50	<0.005	8	--

05532000 ADDISON CREEK AT BELLWOOD, IL

LOCATION.--Lat 41°52'48", long 87°52'07", in SW1/4SE1/4 sec.9, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank at downstream side of bridge on Washington Boulevard in Bellwood, 1,050 ft upstream from Chicago Great Western Railway bridge and at mile 3.2.

DRAINAGE AREA.--17.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1950 to June 1951, October 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952. WSP 1708: 1958, 1959(P). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 617.65 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to Oct. 26, 1951, at datum 2.00 ft higher.

REMARKS.--Water-discharge records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 15.5 ft^3/s, 11.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft^3/s, Aug. 14, 1987, gage height, 12.84 ft; no flow Sept. 14, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1800	327	5.83	July 18	2400	306	6.58
Nov. 4	1245	325	5.80	Sept. 1	0515	*541	*8.03
June 1	0615	336	5.93				

Minimum discharge, 3.1 ft^3/s, July 9, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	9.4	20	10	11	6.3	14	8.2	141	3.6	21	232
2	39	6.7	15	8.3	e10	6.7	14	11	42	35	18	77
3	11	7.6	10	8.3	e9.0	13	16	11	47	12	15	32
4	7.3	121	9.1	8.5	e8.0	58	14	10	18	6.1	132	33
5	6.8	48	9.0	11	e7.5	22	13	21	10	8.2	108	26
6	6.6	36	10	33	e7.1	11	13	9.1	11	5.2	51	105
7	6.7	24	10	41	e6.9	11	12	7.4	9.1	3.8	29	32
8	6.2	24	9.1	37	e6.6	9.8	12	7.6	6.7	3.8	32	24
9	5.0	43	9.1	24	e6.3	11	11	8.7	6.5	3.4	28	56
10	5.6	73	9.0	15	e6.2	14	11	6.8	6.4	3.4	17	34
11	6.5	28	8.5	12	e6.1	16	11	6.7	5.9	7.9	18	17
12	6.5	53	8.3	15	e6.2	15	11	6.6	49	20	13	15
13	7.4	37	e8.2	10	e7.6	14	11	6.5	12	6.7	11	54
14	8.3	17	e8.1	9.5	e9.0	21	11	6.1	8.3	5.2	13	19
15	7.3	40	e8.0	8.3	e11	27	9.9	6.9	8.2	4.7	12	15
16	11	101	e8.0	7.8	e9.6	13	9.7	6.7	9.3	4.5	9.7	13
17	116	45	e8.2	8.4	e8.8	34	11	6.8	6.9	4.5	8.6	11
18	53	32	8.4	8.9	e8.0	30	16	6.3	5.9	62	8.0	11
19	19	52	8.6	8.4	e7.2	26	13	27	5.3	136	7.9	11
20	17	25	11	8.7	e8.0	19	12	18	5.8	117	29	10
21	22	14	11	8.3	e8.6	16	9.8	8.4	5.8	58	8.4	9.4
22	15	13	43	7.4	e7.7	15	10	7.3	6.0	29	24	9.5
23	41	16	40	8.4	e7.0	14	9.0	8.3	10	23	9.5	9.6
24	5.0	11	18	8.6	6.5	14	9.2	6.4	7.6	19	8.7	8.9
25	9.0	10	10	9.0	7.2	12	9.7	20	5.2	20	8.1	9.1
26	8.8	43	8.9	12	6.6	11	9.3	10	22	20	8.5	8.4
27	9.2	29	54	9.7	6.4	18	9.1	7.4	6.7	14	7.3	8.6
28	9.5	15	34	9.6	6.2	50	34	5.6	11	12	30	9.2
29	7.9	16	19	20	---	34	12	37	8.1	26	11	7.7
30	6.8	13	13	15	---	22	9.6	15	4.3	67	10	7.3
31	6.5	---	11	13	---	17	---	23	---	27	9.8	---
TOTAL	495.8	1000.7	457.5	414.1	216.3	600.8	367.3	346.8	501.0	768.0	716.5	914.7
MEAN	16.0	33.4	14.8	13.4	7.72	19.4	12.2	11.2	16.7	24.8	23.1	30.5
MAX	116	121	54	41	11	58	34	37	141	136	132	232
MIN	5.0	6.7	8.0	7.4	6.1	6.3	9.0	5.6	4.3	3.4	7.3	7.3
CFSM	.89	1.86	.82	.75	.43	1.08	.68	.62	.93	1.38	1.29	1.70
IN.	1.03	2.08	.95	.86	.45	1.25	.76	.72	1.04	1.60	1.49	1.90

CAL YR 1988 TOTAL 6351.9 MEAN 17.4 MAX 199 MIN 1.9 CFSM .97 IN. 13.20
WTR YR 1989 TOTAL 6799.5 MEAN 18.6 MAX 232 MIN 3.4 CFSM 1.04 IN. 14.13

e Estimated

05532000 ADDISON CREEK AT BELLWOOD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
06...	1200	17002	17002	6.8	1060	8.30	11.5	26	9.3	25	K3500
NOV											
17...	1100	17002	17002	37	876	7.50	7.0	58	10.2	31	K15000
JAN											
19...	1145	17002	17002	8.4	1410	8.60	3.0	2.8	16.0	27	740
FEB											
15...	1100	17002	17002	11	3140	7.60	1.0	4.1	12.4	33	K2600
MAR											
28...	1100	17002	17002	54	1470	7.90	14.0	29	7.4	70	K9400
MAY											
10...	1100	17002	17002	7.0	1330	8.10	13.0	9.1	11.2	31	K4700
JUN											
29...	1130	17002	17002	8.4	1120	7.10	21.0	1.9	6.0	29	2100
JUL											
19...	1100	17002	17002	83	596	8.10	20.5	62	6.5	48	K37000

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT											
06...	270	270	68	67	24	24	110	100	11	11	96
NOV											
17...	270	270	70	68	26	24	73	73	5.9	5.4	91
JAN											
19...	370	370	93	91	35	34	130	130	11	11	130
FEB											
15...	330	330	87	86	29	28	480	470	14	14	120
MAR											
28...	250	250	69	64	25	22	200	200	6.6	5.9	86
MAY											
10...	340	340	87	84	33	32	150	140	16	15	110
JUN											
29...	320	--	77	--	30	31	130	--	15	16	120
JUL											
19...	140	140	42	35	17	13	70	68	9.1	7.8	64

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05532000 ADDISON CREEK AT BELLWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 06...	130	431	28	9	7.50	0.130	0.006	0.710	0.690	680	<50
NOV 17...	110	374	49	8	2.60	0.230	0.001	0.330	0.230	1500	130
JAN 19...	190	593	19	7	10.0	0.060	0.003	1.33	1.18	300	60
FEB 15...	770	1500	22	7	6.70	0.170	<0.001	1.02	0.940	300	110
MAR 28...	320	702	223	62	3.30	0.340	0.007	0.610	0.480	1500	160
MAY 10...	190	583	17	8	7.80	0.700	0.021	1.38	1.17	780	600
JUN 29...	160	--	11	8	7.60	0.230	0.001	1.22	1.09	190	60
JUL 19...	79	268	134	33	3.90	0.400	0.021	0.620	0.400	2800	80

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT 06...	30	28	<0.5	<0.5	600	590	<3	<3	<5	<5	<5
NOV 17...	40	32	<0.5	<0.5	270	260	<3	<3	<5	<5	<5
JAN 19...	30	28	<0.5	<0.5	650	630	<3	<3	6	<5	<5
FEB 15...	40	42	<1.0	<1	580	570	<3	<3	6	<5	<5
MAR 28...	60	40	<0.5	<0.5	280	280	<3	<3	10	<5	<5
MAY 10...	30	31	<2.0	<2	680	660	<3	<3	7	<5	<5
JUN 29...	40	37	<0.5	<0.5	790	790	<3	4	<5	<5	<5
JUL 19...	50	24	<0.5	<0.5	350	330	<5	--	10	<5	<5

05532000 ADDISON CREEK AT BELLWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT 06...	<5	15	11	1000	<50	6	<5	61	33	10	11
NOV 17...	<5	7	<5	1900	54	10	<5	86	57	<5	<5
JAN 19...	<5	26	21	470	<50	6	<5	95	84	14	14
FEB 15...	<5	29	--	470	55	6	<5	100	95	14	15
MAR 28...	<5	25	11	2100	<50	50	<5	140	99	11	10
MAY 10...	<5	17	14	510	<50	6	<5	110	92	18	9
JUN 29...	<5	6	6	270	<50	<5	<5	66	34	17	13
JUL 19...	<5	24	6	4100	56	22	<5	140	44	16	12

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 06...	<3	<3.0	1500	1400	<5	<5	<100	<100	<0.005	1
NOV 17...	<3	<3.0	520	510	<5	<5	<100	<100	<0.005	<1
JAN 19...	<3	<3.0	1500	1500	<5	<5	<100	<100	<0.005	1
FEB 15...	<3	<3.0	1500	1400	<5	<5	<100	<100	0.006	1
MAR 28...	<3	<3.0	670	650	<5	<5	120	<100	0.006	2
MAY 10...	<3	<3.0	1500	1500	<5	<5	<100	<100	<0.005	<1
JUN 29...	<3	<3.0	1700	--	<5	<5	<50	<50	<0.005	--
JUL 19...	<3	<3.0	600	560	7	<5	<100	--	<0.005	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL

LOCATION.--Lat 41°49'20", long 87°49'15", in SW1/4SW1/4 sec.36, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank 400 ft downstream from bridge on Barry Point Road in Riverside, 500 ft downstream from Hoffman Dam, 4,000 ft downstream from Salt Creek, and at mile 44.3.

DRAINAGE AREA.--630 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1174: 1944, 1948. WSP 1308: 1944(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 594.68 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 27, 1946, nonrecording gage at bridge 400 ft upstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Occasional regulation by gates of Hoffman Dam. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--46 years, 503 ft^3/s, 10.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,770 ft^3/s, Aug. 15, 1987, gage height, 9.90 ft; no flow Aug. 22-24, 1962, and part of Sept. 5, 1968, Aug. 31, Oct. 7, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1919, reached a discharge of 7,450 ft^3/s, from information furnished by Metropolitan Sanitary District of Greater Chicago.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,720 ft^3/s, Aug. 5, gage height, 6.62 ft; minimum daily, 147 ft^3/s, July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	195	380	347	411	e200	521	372	2060	212	695	2640
2	424	199	340	299	381	e190	493	370	1290	280	472	2580
3	353	195	310	276	357	e220	524	359	950	279	364	1630
4	249	872	283	258	288	794	497	321	806	180	1990	957
5	203	1220	265	258	202	884	477	387	564	168	3600	681
6	185	675	261	428	e250	650	456	319	444	160	3370	1140
7	175	474	254	489	e240	499	427	282	371	164	2400	1020
8	168	368	242	1030	e230	406	403	259	329	156	1490	741
9	164	432	227	605	e220	372	379	262	277	155	933	957
10	165	1270	221	546	e210	424	337	250	239	165	696	894
11	174	861	196	432	e220	559	333	224	215	233	654	643
12	158	721	194	408	e225	648	332	219	547	395	612	558
13	161	846	206	366	e230	640	308	215	527	250	490	783
14	160	576	208	323	e260	632	298	204	386	192	605	798
15	156	639	219	293	e240	814	295	197	314	168	455	648
16	189	1740	184	270	e230	683	280	206	275	155	373	542
17	799	1400	187	260	e220	733	298	201	243	147	340	455
18	1940	858	183	259	e210	1140	334	194	222	334	312	404
19	815	830	191	255	e200	836	337	314	205	2010	283	366
20	409	709	212	250	e200	699	302	495	200	2110	442	327
21	319	547	226	241	e210	627	285	323	196	1530	302	297
22	272	469	341	233	e210	548	275	259	192	832	318	272
23	396	407	875	228	e190	464	262	238	196	525	270	242
24	433	376	488	235	e180	423	251	218	200	376	238	226
25	308	352	378	246	e190	393	327	365	224	334	226	217
26	251	578	315	289	e200	372	366	325	320	484	207	223
27	223	707	786	310	e200	406	331	285	261	384	192	208
28	219	576	1110	294	e205	615	576	247	264	355	485	210
29	203	494	687	386	---	859	596	495	287	337	530	209
30	187	430	493	440	---	638	446	446	247	1610	325	204
31	181	---	405	426	---	568	---	373	---	1010	269	---
TOTAL	10214	20016	10877	10980	6609	17936	11346	9224	12851	15690	23938	21072
MEAN	329	667	351	354	236	579	378	298	428	506	772	702
MAX	1940	1740	1110	1030	411	1140	596	495	2060	2110	3600	2640
MIN	156	185	183	228	180	190	251	194	192	147	192	204
CFSM	.52	1.06	.56	.56	.37	.92	.60	.47	.68	.80	1.23	1.11
IN.	.60	1.18	.64	.65	.39	1.06	.67	.54	.76	.93	1.41	1.24

CAL YR 1988 TOTAL 214529 MEAN 586 MAX 2970 MIN 150 CFSM .93 IN. 12.67
WTR YR 1989 TOTAL 170753 MEAN 468 MAX 3600 MIN 147 CFSM .74 IN. 10.08

e Estimated

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979-82, 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOCITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)
OCT											
12...	1150	81700	17002	9	80.0	E1.25	2.92	157	1250	8.40	10.0
12...	1151	81700	80020	9	80.0	E1.25	2.92	157	1200	8.18	10.0
NOV											
08...	1100	81700	17002	9	105	E2.00	3.31	374	896	7.70	8.0
08...	1101	81700	80020	9	105	E2.00	3.31	374	885	8.18	8.0
DEC											
07...	1200	81700	17002	9	105	E2.00	3.12	256	1150	8.60	7.5
07...	1201	81700	80020	9	105	E2.00	3.12	256	1160	8.18	7.5
JAN											
11...	1300	81700	17002	11	230	E1.00	3.38	424	1410	8.60	5.5
11...	1301	81700	80020	11	230	E1.00	3.38	424	1380	8.05	5.5
11...	1315	81700	17002	11	230	E1.00	3.38	424	1410	8.60	5.5
11...	1316	81700	80020	11	230	E1.00	3.38	424	1380	8.05	5.5
FEB											
07...	1200	81700	17002	2	220	E1.50	3.23	E240	1480	6.90	-20.0
07...	1201	81700	80020	2	220	E1.50	3.23	E240	1530	8.25	-20.0
MAR											
08...	1245	81700	17002	10	220	E0.50	3.37	402	1890	7.30	2.0
08...	1246	81700	80020	10	220	E0.50	3.37	402	1890	7.66	2.0
APR											
05...	1330	81700	17002	10	220	E1.00	3.50	477	1370	8.10	10.0
05...	1331	81700	80020	10	220	E1.00	3.50	477	1360	8.05	10.0
MAY											
11...	1130	81700	17002	10	88.0	E2.50	3.09	228	1390	7.90	16.0
11...	1131	81700	80020	10	88.0	E2.50	3.12	228	1410	8.05	16.0
JUN											
06...	1045	81700	17002	11	235	E1.50	3.44	446	1210	7.30	29.0
06...	1046	81700	80020	11	235	E1.50	3.46	446	1230	7.76	29.0
JUL											
11...	1215	81700	17002	10	65.0	E3.00	3.04	250	1290	7.70	28.0
11...	1216	81700	80020	10	65.0	E3.00	3.06	250	1280	7.98	28.0
AUG											
03...	0900	81700	80020	11	230	E1.50	3.33	368	1020	8.08	30.5
09...	1115	81700	17002	11	230	E2.50	3.94	933	831	7.50	26.0
09...	1116	81700	80020	11	230	E2.50	3.94	933	819	7.87	26.0
31...	1031	81700	80020	9	104	E2.00	3.16	261	1000	7.94	27.5
31...	1046	81700	80020	9	104	E2.00	3.16	261	997	7.72	27.5

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT											
12...	11.5	22	9.7	46	K1200	--	320	130	12	75	77
12...	--	--	--	--	--	--	--	--	12	--	--
NOV											
08...	8.0	12	9.0	32	K2700	--	250	92	4.0	63	62
08...	--	--	--	--	--	--	--	--	4.0	--	--
DEC											
07...	4.0	3.4	10.6	15	--	--	370	170	17	89	89
07...	--	--	--	--	2400	2067	--	--	17	--	--
JAN											
11...	1.0	35	12.3	24	K1900	--	310	140	10	77	75
11...	--	--	--	--	--	2900	--	--	10	--	--
11...	1.0	34	12.3	23	K3400	--	310	140	15	77	76
11...	--	--	--	--	--	1100	--	--	15	--	--
FEB											
07...	0.0	6.3	12.9	25	K1600	--	380	140	7.0	92	91
07...	--	--	--	--	--	2700	--	--	7.0	--	--
MAR											
08...	2.0	17	11.9	32	K1400	--	360	180	7.0	87	87
08...	--	--	--	--	--	2400	--	--	7.0	--	--
APR											
05...	9.0	5.8	9.7	26	--	--	400	180	8.0	97	94
05...	--	--	--	--	2700	6100	--	--	8.0	--	--
MAY											
11...	14.0	15	9.2	36	740	--	400	180	3.0	93	93
11...	--	--	--	--	--	700	--	--	3.0	--	--
JUN											
06...	20.0	7.6	6.5	34	K7000	--	320	130	15	78	76
06...	--	--	--	--	--	11333	--	--	15	--	--
JUL											
11...	27.5	9.1	6.7	37	K1500	--	330	130	3.0	80	79
11...	--	--	--	--	--	1600	--	--	3.0	--	--
AUG											
03...	--	--	--	--	--	--	--	--	7.0	--	--
09...	21.0	30	7.0	39	K5900	--	250	95	7.0	64	60
09...	--	--	--	--	--	6230	--	--	7.0	--	--
31...	--	--	--	--	--	2100	--	--	4.0	--	--
31...	--	--	--	--	--	5100	--	--	7.0	--	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
12...	29	30	130	--	12	12	--	--	--	--	191
12...	--	--	--	--	--	--	0	231	190	189	--
NOV											
08...	24	24	89	88	6.8	6.5	--	--	--	--	163
08...	--	--	--	--	--	--	0	200	160	164	--
DEC											
07...	37	36	110	110	8.7	8.4	--	--	--	--	205
07...	--	--	--	--	--	--	0	250	200	205	--
JAN											
11...	31	30	150	150	6.8	6.5	--	--	--	--	176
11...	--	--	--	--	--	--	0	215	180	176	--
11...	31	30	150	150	6.8	6.6	--	--	--	--	176
11...	--	--	--	--	--	--	0	210	170	172	--
FEB											
07...	38	38	170	160	8.7	8.6	--	--	--	--	247
07...	--	--	--	--	--	--	0	303	250	248	--
MAR											
08...	34	34	260	--	8.7	--	--	--	--	--	179
08...	--	--	--	--	--	--	0	216	180	177	--
APR											
05...	42	41	130	130	6.9	6.9	--	--	--	--	220
05...	--	--	--	--	--	--	0	265	220	217	--
MAY											
11...	41	41	140	150	8.3	8.3	--	--	--	--	224
11...	--	--	--	--	--	--	0	273	220	224	--
JUN											
06...	34	32	130	130	6.7	6.2	--	--	--	--	188
06...	--	--	--	--	--	--	0	229	190	188	--
JUL											
11...	34	33	140	140	12	12	--	--	--	--	207
11...	--	--	--	--	--	--	0	251	210	206	--
AUG											
03...	--	--	--	--	--	--	0	210	170	172	--
09...	27	25	70	70	5.2	4.4	--	--	--	--	159
09...	--	--	--	--	--	--	0	193	160	158	--
31...	--	--	--	--	--	--	0	200	170	164	--
31...	--	--	--	--	--	--	0	193	160	158	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE (MG/L AS SO4) (00946)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
12...	120	120	180	1.1	1.0	--	744	--	33	7	--
12...	--	--	--	--	--	--	--	--	--	--	0.110
NOV											
08...	--	78	130	0.6	--	--	528	502	22	8	--
08...	--	--	--	--	--	0.076	--	--	--	--	0.080
DEC											
07...	--	150	160	0.6	--	--	717	709	11	3	--
07...	--	--	--	--	--	--	--	--	--	--	0.130
JAN											
11...	--	110	280	0.5	--	--	832	785	36	7	--
11...	--	--	--	--	--	--	--	--	--	--	0.070
11...	--	110	280	0.5	--	--	832	783	33	8	--
11...	--	--	--	--	--	--	--	--	--	--	0.070
FEB											
07...	--	150	280	0.7	--	--	948	911	5	5	--
07...	--	--	--	--	--	1.2	--	--	--	--	0.090
MAR											
08...	--	110	420	0.6	--	--	1130	--	21	9	--
08...	--	--	--	--	--	--	--	--	--	--	0.080
APR											
05...	--	140	220	0.4	--	--	801	769	24	5	--
05...	--	--	--	--	--	--	--	--	--	--	0.130
MAY											
11...	150	150	220	0.8	0.84	--	848	821	33	10	--
11...	--	--	--	--	--	0.15	--	--	--	--	0.170
JUN											
08...	100	110	200	0.5	0.46	--	758	685	56	11	--
08...	--	--	--	--	--	--	--	--	--	--	0.140
JUL											
11...	130	130	190	1.2	0.96	--	800	739	25	12	--
11...	--	--	--	--	--	--	--	--	--	--	0.160
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	76	77	110	0.4	0.39	--	582	454	89	15	--
09...	--	--	--	--	--	0.10	--	--	--	--	0.060
31...	--	--	--	--	--	--	--	--	--	--	0.120
31...	--	--	--	--	--	--	--	--	--	--	0.110

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
12...	11.0	11.0	0.110	0.120	0.006	--	1.8	--	1.91	1.64	--
12...	--	11.0	--	0.110	--	1.1	1.3	1.2	1.90	1.70	1.60
NOV											
08...	3.50	3.50	0.230	0.230	0.002	--	1.2	--	0.600	0.510	--
08...	--	4.10	--	0.250	--	0.85	1.2	1.1	0.620	0.560	0.510
DEC											
07...	6.90	7.00	0.640	0.580	0.037	--	1.5	--	1.20	1.20	--
07...	--	7.30	--	0.630	--	0.97	2.1	1.6	1.20	1.10	1.00
JAN											
11...	4.30	4.30	0.490	0.490	0.022	--	1.8	--	0.610	0.570	--
11...	--	4.10	--	0.510	--	0.69	1.5	1.2	0.630	0.580	0.540
11...	4.20	4.20	0.500	0.490	0.023	--	1.7	--	0.630	0.550	--
11...	--	4.10	--	0.500	--	0.90	1.5	1.4	0.620	57.0	0.540
FEB											
07...	6.30	6.30	0.430	0.420	<0.001	--	1.6	--	1.06	0.940	--
07...	--	5.60	--	0.420	--	1.2	1.8	1.6	1.10	0.990	0.950
MAR											
08...	4.80	4.70	0.640	0.620	0.001	--	2.3	--	0.720	0.660	--
08...	--	4.60	--	0.650	--	0.55	1.2	1.2	0.770	0.660	0.620
APR											
05...	5.70	5.70	0.740	0.770	0.017	--	1.8	--	0.686	0.560	--
05...	--	5.60	--	0.570	--	1.1	2.0	1.7	0.760	0.600	0.590
MAY											
11...	7.50	6.70	0.430	0.420	0.009	--	1.7	--	1.09	0.890	--
11...	--	6.30	--	0.360	--	0.64	1.5	1.0	1.10	0.960	0.910
JUN											
06...	3.00	3.00	0.420	0.460	0.003	--	1.7	--	0.590	0.220	--
06...	--	2.90	--	0.380	--	1.0	1.7	1.4	0.630	0.450	0.440
JUL											
11...	7.20	7.20	0.680	0.670	0.024	--	2.7	--	1.20	1.03	--
11...	--	6.90	--	0.580	--	1.0	1.7	1.6	1.10	1.00	1.00
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	2.30	2.30	0.200	0.230	0.003	--	1.9	--	0.570	0.320	--
09...	--	2.30	--	0.160	--	0.44	1.4	0.60	0.560	0.330	0.310
31...	--	4.60	--	0.140	--	0.96	0.90	1.1	1.40	1.00	0.990
31...	--	4.60	--	0.150	--	0.65	1.1	0.80	1.30	0.990	0.990

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT											
12...	860	<50	--	3	3	30	22	<0.5	<0.5	460	--
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	710	120	--	2	1	30	25	<0.5	<0.5	240	230
08...	--	--	<1	--	--	--	--	--	--	--	--
DEC											
07...	250	<50	--	2	2	30	29	<0.5	<0.5	320	320
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
11...	680	50	--	7	1	30	30	<0.5	<0.5	190	190
11...	--	--	--	--	--	--	--	--	--	--	--
11...	660	50	--	2	1	30	30	<0.5	<0.5	190	190
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	200	80	--	1	1	30	30	<0.5	<0.5	320	310
07...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
08...	470	110	--	2	1	10	10	<0.5	<0.5	210	220
08...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	450	170	--	1	1	40	38	<0.5	<0.5	220	210
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	780	250	--	2	2	40	38	<1.0	<1	370	370
11...	--	--	<1	--	--	--	--	--	--	--	--
JUN											
06...	1400	300	--	3	2	60	46	<0.5	<0.5	220	220
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	590	90	--	3	3	40	35	<0.5	<0.5	480	470
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	1500	80	--	2	2	60	39	<0.5	<0.5	200	200
09...	--	--	1	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-FRABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT											
12...	0.5	0.35	<5	<5	<5	<5	7	<5	1300	<50	8
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	0.46	0.15	<5	<5	<5	<5	<5	<5	1000	280	5
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	0.2	0.30	6	--	<5	<5	7	6	530	130	5
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
11...	0.3	<0.1	10	10	<5	<5	6	<5	1100	<50	<5
11...	--	--	--	--	--	--	--	--	--	--	--
11...	0.3	0.2	11	8	<5	<5	9	<5	1100	<50	5
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	0.4	0.2	8	7	<5	<5	8	9	310	<50	<5
07...	--	--	--	--	--	--	--	--	--	--	--
MAR											
08...	0.2	<0.1	8	<5	<5	<5	9	<5	610	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	0.2	<0.1	6	7	<5	<5	<5	<5	610	<50	<5
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	1.2	<0.1	<5	<5	<5	<5	6	<5	910	<50	6
11...	--	--	--	--	--	--	--	--	--	--	--
JUN											
06...	0.1	<0.1	7	<5	<5	<5	7	<5	1700	<50	8
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	0.2	<0.1	10	<5	<5	<5	<5	<5	760	<50	6
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	0.4	0.1	8	<5	<5	<5	12	<5	2500	<50	14
09...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT											
12...	<5	54	25	--	--	--	12	9	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	<5	56	41	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	7	--	--	--	--	--
DEC											
07...	5	54	47	--	--	--	12	14	<1	<3	<3.0
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
11...	<5	65	48	--	--	--	7	8	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
11...	<5	65	49	--	--	--	10	<5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	<5	74	81	--	--	--	11	9	<1	<3	<3.0
07...	--	--	--	--	--	9	--	--	--	--	--
MAR											
08...	<5	81	67	--	--	--	10	<5	<1	<5	<3.0
08...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	<5	89	70	--	--	--	10	10	<1	<3	<3.0
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	<5	82	51	--	--	--	8	<5	<1	<3	<3.0
11...	--	--	--	--	--	9	--	--	--	--	--
JUN											
06...	<5	87	48	--	--	--	14	11	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	<5	85	27	--	--	--	11	<5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	<5	110	31	--	--	--	<5	<5	<1	<3	<3.0
09...	--	--	--	--	--	7	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
12...	910	--	<5	<5	<100	<100	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	550	530	<5	<5	<100	<100	--	--	--	--	--
08...	--	--	--	--	--	--	1.5	0.7	10	1.3	7.2
DEC											
07...	740	730	<5	<5	<100	<100	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
11...	550	530	<5	<5	190	<50	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	540	--	<5	<5	<100	<100	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	800	790	<5	<5	110	--	--	--	--	--	--
07...	--	--	--	--	--	--	3.6	<0.4	14	0.8	9.2
MAR											
08...	580	--	<5	<5	<100	<100	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	630	620	<5	<5	<50	<50	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	790	--	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	1.5	1.0	15	1.7	12
JUN											
06...	550	540	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	920	920	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	390	380	<5	<5	110	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
12...	--	9.5	--	--	1.0	<0.005	5	1	--	--	--
12...	--	--	6.2	1.6	--	--	--	--	38	18	98
NOV											
08...	--	9.0	--	--	1.0	<0.005	8	1	--	--	--
08...	1.2	--	5.1	0.9	--	--	--	--	24	24	99
DEC											
07...	--	8.3	--	--	<0.005	<0.005	<5	<1	--	--	--
07...	--	--	5.8	0.7	--	--	--	--	--	--	--
JAN											
11...	--	8.6	--	--	2.0	<0.005	7	<1	--	--	--
11...	--	--	6.5	1.0	--	--	--	--	35	40	100
11...	--	8.1	--	--	2.0	<0.005	6	1	--	--	--
11...	--	--	5.3	0.9	--	--	--	--	35	40	100
FEB											
07...	--	9.2	--	--	--	0.005	7	1	--	--	--
07...	0.8	--	7.2	0.5	--	--	--	--	9	7.8	100
MAR											
08...	--	12	--	--	2.0	<0.005	10	<1	--	--	--
08...	--	--	8.2	0.7	--	--	--	--	46	50	98
APR											
05...	--	8.9	--	--	<0.005	<0.005	<5	1	--	--	--
05...	--	--	6.3	1.2	--	--	--	--	19	24	94
MAY											
11...	--	9.8	--	--	2.0	<0.005	10	<1	--	--	--
11...	1.4	--	7.1	1.4	--	--	--	--	26	16	99
JUN											
08...	--	10	--	--	2.0	<0.005	9	1	--	--	--
08...	--	--	6.9	1.2	--	--	--	--	46	55	100
JUL											
11...	--	11	--	--	<5.0	<0.005	8	<1	--	--	--
11...	--	--	8.8	1.6	--	--	--	--	23	18	99
AUG											
03...	--	--	6.7	1.9	--	--	--	--	63	63	98
09...	--	11	--	--	<5.0	<0.005	3	1	--	--	--
09...	--	--	6.8	2.9	--	--	--	--	84	212	99
31...	--	--	6.6	1.9	--	--	--	--	37	26	99
31...	--	--	6.5	1.9	--	--	--	--	37	26	100

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
12...	1212	81700	81700	0.90	1	80.0	62.0	1250	8.60	11.0	9.9
12...	1213	81700	81700	1.00	1	80.0	54.0	1250	8.50	11.0	9.8
12...	1214	81700	81700	1.50	1	80.0	46.0	1250	8.50	11.5	9.7
12...	1215	81700	81700	1.50	1	80.0	38.0	1250	8.50	11.5	9.6
12...	1216	81700	81700	1.50	1	80.0	30.0	1250	8.40	11.5	9.7
12...	1217	81700	81700	0.80	1	80.0	22.0	1250	8.40	11.5	9.6
12...	1218	81700	81700	0.90	1	80.0	14.0	1250	8.30	11.5	9.6
12...	1219	81700	81700	0.90	1	80.0	6.00	1250	8.30	11.5	9.7
12...	1220	81700	81700	0.30	1	80.0	-2.00	1250	8.30	12.0	9.7
NOV											
08...	1102	81700	81700	1.00	1	105	95.0	898	7.90	8.0	9.3
08...	1103	81700	81700	1.00	1	105	85.0	898	7.80	8.0	9.3
08...	1104	81700	81700	1.00	1	105	75.0	899	7.70	8.0	9.2
08...	1105	81700	81700	1.00	1	105	65.0	894	7.70	8.0	9.1
08...	1106	81700	81700	1.00	1	105	55.0	896	7.70	8.0	9.0
08...	1107	81700	81700	1.00	1	105	45.0	897	7.70	8.0	9.0
08...	1108	81700	81700	1.00	1	105	35.0	897	7.60	8.0	9.1
08...	1109	81700	81700	1.00	1	105	25.0	895	7.60	8.0	9.1
08...	1110	81700	81700	1.00	1	105	15.0	876	7.60	8.0	9.5
DEC											
07...	1115	81700	81700	1.00	1	105	15.0	1180	8.90	4.0	11.4
07...	1116	81700	81700	1.00	1	105	25.0	1160	8.70	4.0	11.3
07...	1117	81700	81700	1.00	1	105	35.0	1150	8.70	4.0	11.0
07...	1118	81700	81700	1.00	1	105	45.0	1180	8.60	4.0	10.6
07...	1119	81700	81700	1.00	1	105	55.0	1180	8.70	4.0	10.6
07...	1120	81700	81700	1.00	1	105	65.0	1150	8.60	4.0	10.6
07...	1121	81700	81700	1.00	1	105	75.0	1160	8.60	4.0	10.5
07...	1122	81700	81700	1.00	1	105	85.0	1130	8.60	4.0	10.5
07...	1123	81700	81700	1.00	1	105	95.0	1180	8.60	4.0	10.6
JAN											
11...	1240	81700	81700	1.00	1	230	20.0	900	8.80	1.0	12.5
11...	1243	81700	81700	1.00	1	230	40.0	1410	8.50	1.0	12.5
11...	1246	81700	81700	1.00	1	230	60.0	1300	8.60	1.0	12.5
11...	1250	81700	81700	1.00	1	230	80.0	1200	8.50	1.0	12.7
11...	1255	81700	81700	1.00	1	230	100	1400	8.70	1.0	12.5
11...	1258	81700	81700	1.00	1	230	120	1410	8.60	1.0	12.3
11...	1302	81700	81700	1.00	1	230	140	1390	8.70	1.0	12.7
11...	1304	81700	81700	1.00	1	230	160	1390	8.70	1.0	12.7
11...	1310	81700	81700	1.00	1	230	180	1410	8.80	1.0	12.5
11...	1317	81700	81700	1.00	1	230	200	1390	8.90	1.0	12.9
11...	1318	81700	81700	1.00	1	230	220	609	8.90	1.0	12.4
FEB											
07...	1202	81700	81700	1.00	1	220	50.0	1500	7.00	0.5	12.7
07...	1203	81700	81700	1.00	1	220	110	1480	6.90	0.0	12.9
MAR											
08...	1235	81700	81700	1.00	1	220	200	1890	7.30	2.5	11.7
08...	1236	81700	81700	1.00	1	220	190	1890	7.30	2.5	11.6
08...	1237	81700	81700	1.00	1	220	160	1890	7.40	2.5	11.6
08...	1238	81700	81700	1.00	1	220	140	1890	7.40	2.0	12.0
08...	1239	81700	81700	1.00	1	220	120	1890	7.40	2.0	11.9
08...	1240	81700	81700	1.00	1	220	100	1890	7.30	2.5	11.9
08...	1241	81700	81700	1.00	1	220	80.0	1890	7.30	2.0	11.9
08...	1242	81700	81700	1.00	1	220	60.0	1890	7.30	2.0	11.9
08...	1243	81700	81700	1.00	1	220	40.0	1880	7.30	2.0	11.8
08...	1244	81700	81700	1.00	1	220	20.0	1880	7.30	2.5	11.9
APR											
05...	1335	81700	81700	1.00	1	220	200	1370	8.10	9.0	9.9
05...	1336	81700	81700	1.00	1	220	180	1370	8.10	9.0	9.8
05...	1337	81700	81700	1.00	1	220	160	1370	8.20	9.0	9.8
05...	1338	81700	81700	1.00	1	220	140	1370	8.10	9.0	9.9
05...	1339	81700	81700	1.00	1	220	120	1350	8.20	9.0	9.8
05...	1340	81700	81700	1.00	1	220	100	1370	8.10	9.0	9.7
05...	1341	81700	81700	1.00	1	220	80.0	1340	8.10	9.0	10.0
05...	1342	81700	81700	1.00	1	220	60.0	1360	8.10	9.0	10.2
05...	1343	81700	81700	1.00	1	220	40.0	1360	8.10	9.0	9.8
05...	1344	81700	81700	1.00	1	220	20.0	1350	8.10	9.0	9.8

ILLINOIS RIVER BASIN

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
MAY											
11...	1146	81700	81700	1.00	1	88.0	6.00	1350	8.30	14.0	10.0
11...	1148	81700	81700	1.00	1	88.0	14.0	1390	8.10	14.0	9.5
11...	1149	81700	81700	1.00	1	88.0	22.0	1380	8.00	14.0	9.4
11...	1151	81700	81700	1.00	1	88.0	30.0	1390	7.90	14.0	9.3
11...	1152	81700	81700	1.00	1	88.0	38.0	1390	7.90	14.0	9.2
11...	1154	81700	81700	1.00	1	88.0	46.0	1390	7.90	14.0	9.2
11...	1155	81700	81700	1.00	1	88.0	54.0	1390	7.90	14.0	9.2
11...	1157	81700	81700	1.00	1	88.0	62.0	1400	7.90	14.0	9.2
11...	1158	81700	81700	1.00	1	88.0	70.0	1400	7.90	14.5	9.5
11...	1200	81700	81700	1.00	1	88.0	78.0	--	8.00	14.5	10.5
JUN											
06...	1040	81700	81700	1.00	1	235	210	1220	7.00	20.0	6.6
06...	1041	81700	81700	1.00	1	235	190	1220	7.20	20.0	6.6
06...	1042	81700	81700	1.00	1	235	170	1210	7.30	20.0	6.5
06...	1043	81700	81700	1.00	1	235	150	1220	7.30	19.5	6.5
06...	1044	81700	81700	1.00	1	235	130	1220	7.30	20.0	6.5
06...	1047	81700	81700	1.00	1	235	110	1210	7.30	20.0	6.5
06...	1048	81700	81700	1.00	1	235	90.0	1210	7.40	20.0	6.5
06...	1049	81700	81700	1.00	1	235	70.0	1210	7.40	20.0	6.6
06...	1050	81700	81700	1.00	1	235	50.0	1210	7.40	20.0	6.6
06...	1051	81700	81700	1.00	1	235	30.0	1200	7.40	20.0	6.6
06...	1052	81700	81700	1.00	1	235	10.0	1200	7.40	20.0	6.4
JUL											
11...	1230	81700	81700	1.00	1	65.0	60.0	1290	7.70	27.5	5.8
11...	1232	81700	81700	1.00	1	65.0	54.0	1290	7.70	27.5	6.3
11...	1234	81700	81700	1.00	1	65.0	48.0	1290	7.70	27.5	6.4
11...	1236	81700	81700	1.00	1	65.0	42.0	1290	7.70	27.5	6.4
11...	1238	81700	81700	1.00	1	65.0	36.0	1290	7.70	27.5	6.5
11...	1240	81700	81700	1.00	1	65.0	30.0	1290	7.70	27.5	6.6
11...	1242	81700	81700	1.00	1	65.0	24.0	1290	7.70	27.5	6.6
11...	1243	81700	81700	1.00	1	65.0	18.0	1290	7.70	27.5	6.6
11...	1244	81700	81700	1.00	1	65.0	12.0	1290	7.70	27.5	6.5
11...	1246	81700	81700	1.00	1	65.0	6.00	1290	7.70	27.5	6.5
AUG											
03...	0845	81700	81700	1.00	1	230	210	1030	7.60	24.0	9.4
03...	0846	81700	81700	1.00	1	230	190	1030	7.60	24.0	8.9
03...	0847	81700	81700	1.00	1	230	170	1030	7.60	24.0	8.7
03...	0848	81700	81700	1.00	1	230	150	1030	7.60	24.0	8.5
03...	0849	81700	81700	1.00	1	230	130	1030	7.60	24.0	8.4
03...	0850	81700	81700	1.00	1	230	110	1020	7.60	24.0	8.3
03...	0851	81700	81700	1.00	1	230	90.0	1020	7.60	24.0	8.3
03...	0852	81700	81700	1.00	1	230	70.0	1020	7.60	24.0	8.2
03...	0853	81700	81700	1.00	1	230	50.0	1020	7.60	24.0	8.3
03...	0854	81700	81700	1.00	1	230	30.0	1020	7.50	24.0	8.3
03...	0855	81700	81700	1.00	1	230	10.0	1020	7.50	24.0	8.2
09...	1057	81700	81700	1.00	1	230	210	831	7.50	21.5	6.8
09...	1058	81700	81700	1.00	1	230	190	831	7.50	21.5	6.7
09...	1059	81700	81700	1.00	1	230	170	832	7.50	21.5	6.8
09...	1100	81700	81700	1.00	1	230	150	829	7.50	21.0	6.7
09...	1101	81700	81700	1.00	1	230	130	831	7.50	21.0	6.9
09...	1102	81700	81700	1.00	1	230	110	831	7.50	21.0	7.0
09...	1103	81700	81700	1.00	1	230	90.0	832	7.50	21.0	7.0
09...	1104	81700	81700	1.00	1	230	70.0	832	7.50	21.0	7.0
09...	1105	81700	81700	1.00	1	230	50.0	832	7.50	21.0	7.0
09...	1106	81700	81700	1.00	1	230	30.0	831	7.50	21.0	6.8
09...	1107	81700	81700	1.00	1	230	10.0	832	7.40	21.5	6.5
31...	1040	81700	81700	1.00	1	104	14.0	975	7.10	22.5	7.5
31...	1041	81700	81700	1.00	1	104	24.0	977	7.40	22.5	7.5
31...	1042	81700	81700	1.00	1	104	34.0	978	7.40	22.5	7.4
31...	1043	81700	81700	1.00	1	104	44.0	982	7.50	22.5	7.2
31...	1044	81700	81700	1.00	1	104	54.0	984	7.40	22.5	7.3
31...	1047	81700	81700	1.00	1	104	64.0	983	7.50	22.5	7.5
31...	1048	81700	81700	1.00	1	104	74.0	983	7.50	23.0	7.4
31...	1049	81700	81700	1.00	1	104	84.0	983	7.50	23.0	7.6
31...	1050	81700	81700	1.00	1	104	94.0	982	7.60	23.0	7.8

05533000 FLAG CREEK NEAR WILLOW SPRINGS, IL

LOCATION.--Lat 41°44'20", long 87°53'48", in SE1/4NE1/4 sec.31, T.38 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on German Church Road, 1.1 mi northwest of Willow Springs and at mile 2.2.

DRAINAGE AREA.--16.5 mi^2.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 606.36 ft above National Geodetic Vertical Datum of 1929. Prior to June 17, 1963, water-stage recorder at same site at datum 3.73 ft higher. June 17, 1963, to June 26, 1964, nonrecording gage at site 0.5 mi upstream at datum 4.82 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plant, 2 mi upstream from gage site.

AVERAGE DISCHARGE.--38 years, 18.8 ft^3/s, 15.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft^3/s, Sept. 14, 1961, gage height, 13.71 ft, present datum; minimum daily, 0.1 ft^3/s, Dec. 9, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 470 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 1	0600	*708	*7.48	No other peak greater than base discharge.			

Minimum daily discharge, 9.5 ft^3/s, Oct. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	19	20	19	e13	25	15	177	14	18	260
2	24	16	17	19	19	e13	24	16	57	23	17	43
3	13	16	17	e18	18	e15	26	16	53	19	16	21
4	11	91	17	e17	17	68	24	15	32	14	22	17
5	11	23	17	e19	17	37	22	19	24	14	56	17
6	10	e15	17	32	17	24	21	15	21	14	22	65
7	10	e14	16	62	16	22	21	15	20	14	18	27
8	10	e15	15	61	e15	21	21	15	19	14	16	20
9	10	e190	15	30	e15	22	19	15	17	14	17	32
10	10	e50	14	26	e15	27	19	14	15	14	17	17
11	10	e35	14	23	e15	29	17	14	16	16	22	16
12	10	e80	15	28	e14	27	16	14	35	30	19	14
13	9.5	e38	15	21	e15	25	16	14	22	16	16	24
14	10	e18	15	20	18	33	16	14	19	15	18	17
15	11	e130	15	19	17	36	16	14	17	14	17	15
16	13	e48	14	19	16	25	16	14	16	13	15	15
17	74	e25	14	18	16	33	16	13	16	14	14	14
18	44	e100	14	18	16	39	18	14	16	34	12	13
19	20	e47	15	18	15	28	17	24	16	117	14	11
20	18	e25	16	17	18	25	16	17	16	112	22	11
21	18	e20	14	17	16	23	14	14	15	74	15	12
22	18	e19	38	17	15	22	15	14	15	28	20	11
23	30	e18	56	17	e14	22	15	14	14	23	16	11
24	21	e18	27	17	e14	23	16	14	14	20	15	10
25	18	e17	21	17	e14	22	16	23	13	18	13	11
26	18	e50	20	20	e13	21	13	15	17	19	13	11
27	18	e34	70	18	e13	30	15	13	18	19	14	11
28	18	e29	43	18	e13	75	24	12	15	16	28	11
29	16	21	28	21	---	58	17	33	14	18	17	11
30	16	20	25	21	---	31	15	18	14	53	15	10
31	16	---	22	21	---	28	---	15	---	21	15	---
TOTAL	546.5	1238	675	709	440	917	546	492	773	844	569	778
MEAN	17.6	41.3	21.8	22.9	15.7	29.6	18.2	15.9	25.8	27.2	18.4	25.9
MAX	74	190	70	62	19	75	26	33	177	117	56	260
MIN	9.5	14	14	17	13	13	13	12	13	13	12	10
CFSM	1.07	2.50	1.32	1.39	.95	1.79	1.10	.96	1.56	1.65	1.11	1.57
IN.	1.23	2.79	1.52	1.60	.99	2.07	1.23	1.11	1.74	1.90	1.28	1.75

CAL YR 1988 TOTAL 8599.4 MEAN 23.5 MAX 428 MIN 9.1 CFSM 1.42 IN. 19.39
WTR YR 1989 TOTAL 8527.5 MEAN 23.4 MAX 260 MIN 9.5 CFSM 1.42 IN. 19.23

e Estimated

05533400 SAWMILL CREEK NEAR LEMONT, IL

LOCATION.--Lat 41°42'28", long 87°57'45", in NE1/4SW1/4 sec.10, T.37 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on concrete abutment 50 ft upstream of bridge on Bluff Road at south edge of Argonne National Laboratory, 2.5 mi northeast of Lemont, and at mile 1.1.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1961-79. December 1985 to current year.

REVISED RECORDS.--WDR IL-77-1: 1961-76(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 630.00 ft above National Geodetic Vertical Datum of 1929. Oct. 11, 1961, to Sept. 30, 1976, crest-stage gage on bridge 50 ft downstream at datum 11.22 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 984 ft^3/s, May 12, 1966, Apr. 18, 1975, gage height, 12.94 ft, present datum at site then in use; maximum gage height, 13.50 ft, Aug. 26, 1987; no flow Oct. 9, 10, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1850	111	10.84	July 19	0045	180	11.03
Nov. 4	1405	153	10.96	July 30	0310	100	10.53
Nov. 10	0105	151	10.99	Aug. 12	1555	172	10.99
Nov. 16	0435	306	11.66	Aug. 28	0915	95	10.49
Dec. 22	1935	92	10.47	Sept. 1	0635	*912	*13.17
Jan. 7	2135	111	10.61	Sept. 6	1010	118	10.66
Mar. 28	1005	90	10.45	Sept. 9	0635	91	10.46
June 1	1535	309	11.61				

No flow Oct. 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	1.1	5.2	6.1	6.2	e2.1	8.3	3.1	196	.45	5.1	354
2	17	.72	4.1	5.0	5.8	e2.4	8.6	2.2	64	8.1	3.5	40
3	3.2	.24	3.9	5.0	4.9	e3.4	12	1.9	60	5.4	1.4	17
4	.83	46	2.7	4.3	3.1	e35	9.5	1.2	29	1.3	4.8	10
5	.44	12	2.7	5.0	e2.5	26	8.2	5.5	15	.72	16	8.2
6	.36	8.6	2.3	17	e2.3	13	6.4	2.0	9.4	.66	4.4	40
7	.22	5.7	2.8	46	e2.4	9.2	5.6	1.4	5.8	.66	3.1	17
8	.09	3.6	1.7	42	e2.6	8.0	5.0	1.1	4.4	.39	1.5	11
9	.00	34	1.3	25	3.4	9.8	4.4	1.2	3.2	.55	10	30
10	.00	59	1.6	15	6.1	13	4.0	.88	2.4	.64	11	13
11	.37	15	1.7	9.6	4.2	14	3.8	.92	1.8	2.2	6.8	7.7
12	.10	22	2.0	15	3.5	13	4.0	.63	17	21	35	5.6
13	.16	23	1.6	7.7	3.4	10	3.4	.59	8.9	2.5	19	19
14	.34	9.6	e1.4	6.4	4.3	17	2.9	.57	4.8	.71	9.6	9.0
15	.26	44	e1.1	4.9	4.6	22	2.9	.97	3.2	.52	6.3	6.1
16	4.0	117	e.96	4.1	4.0	12	3.7	.52	2.7	.46	3.7	4.8
17	33	24	e.92	3.5	3.6	17	4.9	.54	2.0	.60	2.6	3.6
18	15	13	1.1	3.4	3.6	21	7.6	.59	1.7	25	1.9	2.6
19	3.3	33	1.3	3.5	3.4	12	6.1	7.9	1.1	65	1.3	2.4
20	1.8	16	2.5	3.7	3.1	10	4.7	5.1	2.1	59	13	2.6
21	3.6	9.6	2.3	3.0	3.8	8.9	4.2	1.9	.97	32	3.6	2.5
22	1.7	6.5	18	2.7	3.5	7.2	2.9	1.4	1.1	11	11	1.8
23	11	5.2	35	2.7	2.5	6.9	2.5	1.1	.84	5.6	5.6	1.5
24	4.8	5.8	13	2.9	e2.2	6.0	2.4	1.2	.62	4.0	3.6	1.3
25	2.0	4.4	8.6	4.2	e2.4	5.4	2.2	13	.42	3.1	1.8	1.1
26	2.0	19	6.3	6.8	e2.2	5.0	2.0	4.5	.69	2.1	1.6	1.1
27	1.6	17	40	4.6	e2.1	9.7	1.8	1.9	.46	1.7	1.3	.87
28	1.2	9.6	29	4.8	e2.0	45	15	1.2	.43	1.2	27	1.1
29	.65	6.7	22	6.8	---	30	6.5	11	.56	7.4	8.3	.94
30	.56	6.8	15	6.7	---	16	3.6	4.2	.51	39	3.7	1.1
31	.40	---	8.4	6.6	---	11	---	3.4	---	9.2	4.8	---
TOTAL	110.14	578.16	240.48	284.0	97.7	421.0	159.1	83.61	441.10	312.16	232.3	616.91
MEAN	3.55	19.3	7.76	9.16	3.49	13.6	5.30	2.70	14.7	10.1	7.49	20.6
MAX	33	117	40	46	6.2	45	15	13	196	65	35	354
MIN	.00	.24	.92	2.7	2.0	2.1	1.8	.52	.42	.39	1.3	.87
CFSM	.27	1.48	.60	.70	.27	1.04	.41	.21	1.13	.77	.58	1.58
IN.	.32	1.65	.69	.81	.28	1.20	.46	.24	1.26	.89	.66	1.77

CAL YR 1988 TOTAL 2563.23 ,MEAN 7.00 MAX 158 MIN .00 CFSM .54 IN. 7.33
WTR YR 1989 TOTAL 3576.66 MEAN 9.80 MAX 354 MIN .00 CFSM .75 IN. 10.23

e Estimated

05534050 DES PLAINES RIVER AT LOCKPORT, IL

LOCATION.--Lat 41°35'47", long 88°04'07", in NE1/4NE1/4 sec.22, T.36 N., R.10 E., Will County, Hydrologic Unit 07120004, at bridge on Division Street, 0.7 mi downstream from bridge on State Highway 7 (Ninth Street in Lockport), 0.4 mi west of Lockport, 4.0 mi upstream from Chicago Sanitary and Ship Canal, and at mile 20.1.

DRAINAGE AREA.--700 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
05...	0830	17002	17002	292	973	7.60	11.0	19	9.2	39	K130
17...	0830	17002	17002	1210	1250	8.00	13.5	13	8.6	37	180
NOV											
09...	0900	17002	17002	454	913	7.20	7.0	14	9.0	18	<10
23...	1030	17002	17002	460	897	7.90	5.0	23	10.9	14	K1900
DEC											
06...	0830	17002	17002	280	1200	7.60	2.0	7.3	11.6	15	K40
29...	0830	17002	17002	800	2040	7.60	0.5	6.6	12.1	29	K24000
JAN											
09...	0830	17002	17002	700	2090	7.20	-2.0	24	10.7	37	K9000
FEB											
08...	0835	17002	17002	230	1620	7.30	0.0	8.5	13.7	32	20
MAR											
14...	0900	17002	17002	740	1660	7.60	7.0	4.0	9.2	29	230
APR											
10...	1100	17002	17002	426	1380	7.70	6.0	10	12.7	28	--
MAY											
10...	1550	17002	17002	390	1400	8.50	17.5	23	17.0	68	--
JUN											
05...	1540	17002	17002	946	1090	7.40	23.0	7.9	6.3	34	--
JUL											
11...	1235	17002	17002	560	1360	8.00	30.0	12	7.7	41	--

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
05...	260	110	65	62	26	25	110	100	9.2	8.8	152
17...	320	130	83	77	33	30	150	150	12	12	184
NOV											
09...	250	99	66	62	26	24	92	89	7.4	6.9	156
23...	300	130	74	72	31	30	85	83	5.7	5.4	176
DEC											
06...	350	140	85	84	36	35	100	100	7.0	6.9	212
29...	260	120	65	64	25	24	280	280	7.3	7.1	144
JAN											
09...	310	150	77	76	29	29	290	--	10	11	156
FEB											
08...	390	170	94	92	40	39	170	160	8.9	8.6	220
MAR											
14...	370	--	89	--	37	--	190	200	8.3	8.4	200
APR											
10...	410	190	99	94	44	42	140	140	5.5	5.2	216
MAY											
10...	400	190	100	93	45	41	160	160	8.5	7.3	216
JUN											
05...	260	100	70	62	30	26	120	110	6.5	5.4	160
JUL											
11...	350	130	83	81	36	35	140	140	11	11	216

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05534050 DES PLAINES RIVER AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
05...	94	150	1.0	533	21	5	6.20	0.110	<0.001	1.3	1.4
17...	120	190	--	690	42	13	8.30	0.040	0.001	2.3	2.3
NOV											
09...	95	130	0.5	504	20	6	4.10	0.230	<0.001	1.1	1.3
23...	100	130	0.5	531	26	7	3.60	0.230	0.002	0.97	1.2
DEC											
06...	130	160	0.6	655	9	4	6.50	0.320	0.001	1.1	1.4
29...	94	530	0.5	1090	24	6	3.80	0.730	0.003	1.7	2.4
JAN											
09...	120	500	0.7	--	17	7	4.80	1.00	0.001	2.1	3.1
FEB											
08...	160	290	0.7	883	11	4	6.10	0.260	<0.001	1.3	1.6
MAR											
14...	130	340	0.6	--	20	7	4.20	0.410	0.002	1.8	2.2
APR											
10...	160	210	0.6	778	14	--	6.20	0.120	<0.001	1.3	1.4
MAY											
10...	150	230	0.7	806	101	--	4.70	0.060	0.006	2.9	3.0
JUN											
05...	96	180	0.4	570	73	--	2.40	0.210	0.003	1.6	1.8
JUL											
11...	130	210	0.9	746	43	--	3.60	0.170	0.013	1.7	1.9

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT										
05...	7.6	0.840	0.730	490	<50	3	20	20	<0.5	<0.5
17...	11	1.26	1.06	2100	680	3	20	13	<0.5	<0.5
NOV										
09...	5.4	0.590	0.540	1100	130	2	30	23	<0.5	<0.5
23...	4.8	0.540	0.470	420	<50	1	20	20	<0.5	<0.5
DEC										
06...	7.9	1.01	0.950	170	<50	1	10	9	<0.5	<0.5
29...	6.2	0.710	0.620	450	<50	1	10	9	<0.5	<0.5
JAN										
09...	7.9	0.830	0.740	400	50	1	30	31	<0.5	<0.5
FEB										
08...	7.7	1.03	0.900	250	80	1	30	30	<0.5	<0.5
MAR										
14...	6.4	0.620	0.520	590	530	1	10	7	<0.5	<0.5
APR										
10...	7.6	0.690	0.530	800	510	3	40	35	<0.5	<0.5
MAY										
10...	7.7	0.980	0.540	1800	210	3	60	37	<1.0	<1
JUN										
05...	4.2	0.580	0.370	1600	320	3	60	39	<0.5	<0.5
JUL										
11...	5.5	0.860	0.660	900	100	4	50	38	<0.5	<0.5

05534050 DES PLAINES RIVER AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT										
05...	380	--	<3	<3	<5	<5	<5	<5	6	<5
17...	600	550	<3	<3	<5	<5	<5	<5	11	<5
NOV										
09...	270	250	<3	<3	<5	<5	<5	<5	<5	<5
23...	240	240	<3	<3	<5	<5	<5	<5	6	<5
DEC										
06...	310	310	<3	<3	<5	<5	<5	<5	<5	<5
29...	190	190	<3	<3	35	<5	<5	<5	7	<5
JAN										
09...	250	250	<3	<3	8	<5	<5	<5	7	<5
FEB										
08...	320	310	<3	<3	6	6	<5	<5	7	<5
MAR										
14...	260	--	4	5	13	10	6	6	8	6
APR										
10...	270	250	<3	<3	6	<5	<5	<5	<5	<5
MAY										
10...	360	350	<3	<3	<5	<5	<5	<5	17	<5
JUN										
05...	220	200	<3	<3	8	<5	<5	<5	9	<5
JUL										
11...	390	390	<3	<3	<5	<5	<5	<5	6	<5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT										
05...	750	<50	6	<5	48	11	<0.05	10	8	<3
17...	1200	<50	16	<5	77	10	<0.05	14	10	<3
NOV										
09...	1000	60	8	<5	53	28	<0.05	7	7	<3
23...	670	<50	<5	<5	44	30	0.06	14	13	<3
DEC										
06...	310	<50	<5	<5	28	22	0.10	<5	<5	<3
29...	760	<50	9	<5	54	40	0.07	<5	<5	<3
JAN										
09...	590	<50	6	<5	66	55	<0.05	14	10	<3
FEB										
08...	360	<50	6	<5	58	49	0.06	12	12	<3
MAR										
14...	580	250	16	<5	97	--	<0.05	16	16	10
APR										
10...	410	<50	<5	<5	53	30	<0.05	9	7	<3
MAY										
10...	2700	<50	17	<5	140	<5	0.11	9	<5	<3
JUN										
05...	2000	<50	11	<5	100	49	<0.05	11	7	<3
JUL										
11...	1100	<50	9	<5	110	30	<0.05	16	7	<3

05534050 DES PLAINES RIVER AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT										
05...	<3.0	700	670	<5	<5	<50	<50	<0.005	6	<1
17...	<3.0	900	860	<5	<5	<100	<100	<0.005	4	2
NOV										
09...	<3.0	540	520	<5	<5	<100	<100	<0.005	5	1
23...	<3.0	470	460	<5	<5	<50	<50	<0.005	6	1
DEC										
06...	<3.0	690	680	<5	<5	<50	<50	<0.005	5	2
29...	<3.0	510	500	<5	<5	<50	<50	0.010	13	<1
JAN										
09...	<3.0	660	--	<5	<5	170	<50	0.006	11	1
FEB										
08...	<3.0	800	770	<5	<5	<100	<100	0.010	6	1
MAR										
14...	11	620	--	<5	<5	<50	<50	<0.005	9	2
APR										
10...	<3.0	690	650	<5	<5	<50	<50	<0.005	5	--
MAY										
10...	<3.0	770	740	6	<5	<50	<50	<0.005	11	--
JUN										
05...	<3.0	440	390	<5	<5	110	<50	<0.005	6	--
JUL										
11...	<3.0	810	810	<5	<5	<50	<50	<0.005	7	--

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL

LOCATION.--Lat 42°09'10", long 87°49'07", in SW1/4SE1/4 sec.34, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on Lake-Cook Road, 1.7 mi southeast of Deerfield, 5.7 mi upstream from Skokie River, and at mile 64.7.

DRAINAGE AREA.--19.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.88 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Water-discharge records fair except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--37 years, 15.1 ft^3/s, 10.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 933 ft^3/s, Aug. 14, 1987, gage height, 11.52 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 290 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	0700	*210	*8.10				

Minimum daily discharge, 0.35 ft^3/s, Oct. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	.81	3.8	e2.0	9.5	e2.9	9.3	12	34	1.2	6.8	109
2	10	.73	5.4	e1.7	8.1	e2.8	8.4	9.2	23	1.1	4.6	26
3	3.6	.77	1.8	e1.5	e6.5	e3.5	7.6	8.1	23	1.1	4.1	15
4	1.2	13	1.1	e1.3	e5.5	e20	8.4	6.9	25	1.1	109	12
5	.49	11	.73	e1.5	e5.0	e25	7.1	6.2	18	1.2	70	8.2
6	.41	7.5	.68	e4.5	e4.7	e12	6.7	5.1	15	1.1	25	14
7	.36	4.7	.70	e12	e4.5	e8.0	5.7	4.5	12	1.1	16	13
8	.37	2.8	.45	e27	e4.2	e7.0	6.2	4.5	7.8	1.1	12	18
9	.45	6.4	.42	e13	e4.0	e9.0	4.6	4.0	5.0	1.3	9.9	18
10	.35	42	.40	e7.5	e3.8	20	3.9	3.7	3.5	1.1	6.6	8.0
11	.41	18	.42	e6.5	e3.6	28	3.8	3.3	2.1	1.1	10	5.6
12	.45	12	.46	e5.5	e4.0	24	4.6	3.2	11	2.2	5.8	4.9
13	.49	16	.48	e4.4	e4.5	20	4.2	3.0	13	1.1	4.5	19
14	.49	8.6	.43	e4.0	e3.8	24	4.2	2.9	11	1.0	3.7	15
15	.47	6.6	.40	e3.5	e3.5	23	4.2	2.9	5.5	1.1	3.6	8.5
16	.48	56	.44	e4.0	e3.4	17	3.7	3.0	4.5	1.0	3.4	6.4
17	4.1	26	.48	e3.5	e3.4	23	3.9	3.5	3.1	1.0	3.2	5.8
18	1.6	14	.49	e3.3	e3.3	25	4.0	3.0	2.2	9.6	3.6	5.0
19	.45	21	.45	e3.2	e3.3	18	4.0	4.8	1.8	34	2.8	4.5
20	.47	16	.74	e3.0	e3.2	17	3.6	3.7	1.7	20	6.7	4.1
21	.61	10	.50	e3.0	e3.2	15	3.3	3.1	1.7	14	3.2	3.7
22	.44	6.4	4.4	e3.5	e3.1	12	3.3	3.1	1.7	9.0	4.2	3.6
23	9.3	4.6	10	e3.7	e2.9	10	3.1	3.0	1.7	4.4	2.8	2.9
24	5.5	3.2	3.9	4.0	e2.9	9.3	3.1	2.8	1.5	3.4	2.7	2.9
25	.97	4.2	4.2	4.4	e3.0	9.4	21	10	1.3	3.3	2.6	2.9
26	.50	20	1.7	6.4	e3.1	9.4	16	7.0	1.3	3.2	2.5	2.9
27	.46	21	37	8.0	e3.0	10	6.9	4.0	1.3	9.0	2.5	2.6
28	.51	12	23	5.6	e2.9	13	33	3.3	1.2	4.7	19	2.6
29	.65	7.3	e13	9.3	---	15	29	11	1.2	5.8	12	2.5
30	.72	5.8	e10	10	---	14	18	17	1.1	31	5.7	2.3
31	.74	---	e8.3	9.3	---	11	---	29	---	10	4.0	---
TOTAL	47.90	378.41	136.27	180.1	115.9	457.3	244.8	190.8	236.2	181.3	372.5	348.9
MEAN	1.55	12.6	4.40	5.81	4.14	14.8	8.16	6.15	7.87	5.85	12.0	11.6
MAX	10	56	37	27	9.5	28	33	29	34	34	109	109
MIN	.35	.73	.40	1.3	2.9	2.8	3.1	2.8	1.1	1.0	2.5	2.3
CFSM	.08	.64	.22	.29	.21	.75	.41	.31	.40	.30	.61	.59
IN.	.09	.71	.26	.34	.22	.86	.46	.36	.45	.34	.70	.66

CAL YR 1988 TOTAL 3815.45 MEAN 10.4 MAX 150 MIN .25 CFSM .53 IN. 7.20
WTR YR 1989 TOTAL 2890.38 MEAN 7.92 MAX 109 MIN .35 CFSM .40 IN. 5.46

e Estimated

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HCCC 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
13...	1200	17002	17002	0.49	776	7.70	6.5	16	8.0	32	K960
NOV											
10...	0830	17002	17002	50	499	6.90	8.5	34	7.2	26	K3300
JAN											
06...	1200	17002	17002	8.5	4660	7.30	0.5	16	10.5	37	K6700
FEB											
09...	0830	17002	17002	5.1	1590	7.50	0.0	4.5	11.2	22	K940
APR											
07...	1300	17002	17002	5.6	1400	7.90	7.0	2.3	11.1	28	3700
MAY											
11...	1000	17002	17002	3.3	1310	7.90	11.5	5.7	11.6	30	K830
JUN											
06...	1000	17002	17002	25	1470	--	20.0	9.6	--	33	K1900

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT											
13...	290	290	69	66	32	31	52	51	4.4	4.2	82
NOV											
10...	180	180	44	42	20	19	33	33	4.3	3.9	53
JAN											
06...	270	270	68	67	25	24	1300	1300	8.5	8.3	73
FEB											
09...	410	410	94	93	45	44	140	140	3.3	3.3	130
APR											
07...	400	400	88	88	44	44	160	--	1.3	1.1	120
MAY											
11...	390	390	86	84	45	44	120	120	3.3	2.7	120
JUN											
06...	370	370	88	84	40	38	170	--	3.7	3.7	95

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 13...	77	312	6	3	0.400	0.100	<0.001	0.140	0.080	730	<50
NOV 10...	50	201	62	11	1.20	0.120	<0.001	0.190	0.090	1800	90
JAN 06...	1400	2850	13	7	0.800	0.350	<0.001	0.110	0.070	290	90
FEB 09...	270	679	7	3	1.00	0.090	<0.001	0.050	0.040	150	80
APR 07...	260	--	8	4	0.200	0.100	0.001	0.070	0.040	600	460
MAY 11...	220	592	6	5	<0.100	0.050	<0.001	0.080	0.060	780	710
JUN 06...	290	--	24	12	1.20	0.480	--	0.140	0.080	890	340

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT 13...	30	29	<0.5	<0.5	130	120	<3	<3	<5	<5	<5
NOV 10...	<50	18	<0.5	<0.5	60	50	<3	<3	5	<5	<5
JAN 06...	10	10	<0.5	<0.5	90	90	<3	<3	<5	<5	<5
FEB 09...	40	39	<0.5	<0.5	120	120	<3	<3	6	6	<5
APR 07...	40	43	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
MAY 11...	40	39	<1.0	<1	100	100	4	5	<5	6	<5
JUN 06...	70	63	<0.5	<0.5	150	150	<3	<3	<5	<5	<5

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT 13...	<5	<5	<5	750	91	7	<5	130	110	<5	<5
NOV 10...	<5	<5	<5	2300	96	<5	<5	70	38	<5	<5
JAN 06...	<5	6	<5	470	<50	5	<5	66	59	<5	<5
FEB 09...	<5	6	--	290	<50	14	<5	61	57	<5	<5
APR 07...	<5	<5	<5	460	<50	<5	<5	100	95	<5	<5
MAY 11...	<5	<5	6	420	84	<5	<5	100	97	<5	<5
JUN 06...	<5	<5	<5	1000	94	<5	<5	100	82	<5	<5

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 13...	<3	<3.0	300	290	<5	<5	<100	<100	<0.005	<1
NOV 10...	<3	<3.0	170	170	<5	<5	<100	<100	<0.005	<1
JAN 06...	<3	<3.0	440	430	<5	<5	<50	<50	0.030	<1
FEB 09...	<3	<3.0	350	350	<5	<5	<50	<50	<0.005	<1
APR 07...	<3	<3.0	310	310	<5	<5	<50	<50	<0.005	1
MAY 11...	<3	<3.0	310	310	<5	<5	<50	<50	<0.005	<1
JUN 06...	<3	<3.0	320	310	<5	<5	<50	<50	<0.005	1

05535000 SKOKIE RIVER AT LAKE FOREST, IL

LOCATION.--Lat 42°13'57", long 87°50'41", in NW1/4SW1/4 sec.4, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on State Highway 60 at Lake Forest and at mile 13.1.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 648.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 12.2 ft^3/s, 12.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft^3/s, Sept. 26, 1986, gage height, 8.27 ft; maximum gage height, 8.35 ft, July 22, 1982; no flow for many days in 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 1	0245	*102	*4.07				

Minimum daily discharge, 0.39 ft^3/s, Oct. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.46	5.1	4.4	6.7	e2.3	9.1	5.3	13	1.6	5.3	34
2	8.2	.50	4.7	4.4	5.7	e3.0	8.7	4.6	8.0	1.6	4.7	6.5
3	1.6	.44	4.6	3.7	5.0	8.2	8.2	4.5	8.5	1.6	3.9	4.8
4	.99	6.3	4.5	3.5	e4.0	47	8.0	4.2	8.5	1.6	26	4.0
5	.81	2.2	4.4	3.4	e3.7	32	9.6	4.0	6.2	1.6	24	3.3
6	.65	2.3	4.3	4.5	e3.3	26	8.6	3.8	5.3	1.6	9.5	5.4
7	.56	1.9	4.3	13	e3.0	19	7.5	3.7	4.8	1.7	7.3	3.1
8	.52	1.8	3.8	11	e2.7	12	7.3	3.7	4.2	1.7	6.3	2.2
9	.56	10	3.5	e4.0	e2.5	12	7.0	3.5	2.8	2.1	5.8	2.8
10	.54	11	3.2	e3.2	e2.2	12	6.8	3.3	2.2	2.7	8.2	2.1
11	.56	2.8	3.0	e2.8	e2.0	15	6.9	3.2	1.8	1.9	6.0	1.7
12	.60	3.9	3.1	e4.0	e1.9	13	7.9	3.1	4.0	1.8	3.4	1.5
13	.54	3.7	3.3	e2.7	e2.2	11	7.2	3.1	4.8	1.7	2.8	8.7
14	.56	2.2	3.7	e2.3	e2.4	12	7.2	3.0	3.6	1.6	2.8	4.5
15	.55	2.5	3.8	e2.2	e2.2	13	6.9	3.0	2.8	1.5	2.8	3.4
16	.45	25	3.4	e2.1	e2.1	11	6.9	2.9	3.1	1.5	2.9	2.6
17	.76	10	3.1	e2.1	e1.9	13	7.5	2.9	2.5	1.6	2.7	2.2
18	.83	7.5	3.4	e2.2	e1.8	13	7.4	e2.8	2.4	4.7	2.6	2.0
19	.46	11	4.0	e2.3	e1.8	11	7.2	e4.0	1.9	12	2.4	1.9
20	.39	8.3	4.2	e2.1	e1.9	11	7.0	e3.5	1.9	12	3.5	1.7
21	.75	6.8	3.6	e2.0	e2.2	9.8	6.5	e3.2	2.0	9.9	2.6	1.7
22	.61	6.2	3.8	e2.1	e2.0	8.5	6.5	e2.8	1.8	5.9	2.4	1.7
23	2.0	6.0	5.8	e2.4	e1.8	7.9	6.6	e2.2	1.8	4.8	2.4	1.7
24	1.1	5.6	5.5	e2.8	e1.7	7.8	6.5	e2.0	3.0	4.4	2.4	1.7
25	.71	5.3	4.6	4.2	e1.7	7.9	13	e5.0	2.2	3.4	2.4	1.8
26	.70	13	3.9	6.3	e1.8	7.9	8.9	e2.9	1.9	7.5	2.4	1.8
27	.61	10	17	5.0	e1.8	8.5	7.8	e2.1	2.2	4.8	2.5	1.7
28	.52	7.2	11	4.5	e1.9	12	15	e2.0	1.9	3.4	11	1.6
29	.56	6.6	9.0	7.4	---	12	7.9	e9.0	1.8	4.7	5.9	1.5
30	.48	6.4	7.6	7.2	---	11	6.3	6.1	1.7	17	3.9	1.5
31	.45	---	5.6	6.9	---	10	---	11	---	6.2	3.1	---
TOTAL	30.82	186.90	154.8	130.7	73.9	399.8	237.9	120.4	112.6	130.1	173.9	115.1
MEAN	.99	6.23	4.99	4.22	2.64	12.9	7.93	3.88	3.75	4.20	5.61	3.84
MAX	8.2	25	17	13	6.7	47	15	11	13	17	26	34
MIN	.39	.44	3.0	2.0	1.7	2.3	6.3	2.0	1.7	1.5	2.4	1.5
CFSM	.08	.48	.38	.32	.20	.99	.61	.30	.29	.32	.43	.30
IN.	.09	.53	.44	.37	.21	1.14	.68	.34	.32	.37	.50	.33

CAL YR 1988 TOTAL 3226.53 MEAN 8.82 MAX 172 MIN .33 CFSM .68 IN. 9.23
WTR YR 1989 TOTAL 1866.92 MEAN 5.11 MAX 47 MIN .39 CFSM .39 IN. 5.34

e Estimated

05535070 SKOKIE RIVER NEAR HIGHLAND PARK, IL

LOCATION.--Lat 42°09'34", long 87°47'52", in NW1/4SE1/4 sec.35, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Clavey Road in Highland Park, and at mile 7.3.

DRAINAGE AREA.--21.1 mi^2.

PERIOD OF RECORD.--August 1967 to current year.

REVISED RECORDS.--WSP 2115: 1968. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 622.83 ft above National Geodetic Vertical Datum of 1929 (city of Highland Park bench mark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--22 years, 21.7 ft^3/s, 13.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft^3/s, Aug. 14, 1987, gage height, 9.09 ft; no flow at times in 1988-89.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1938 reached a stage of 10.6 ft, discharge not determined, from information furnished by Highland Park City Engineer.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 3	1645	*298	*6.65	Sept. 1	0630	292	6.62

No flow July 6, 7, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	1.7	5.3	4.6	10	e2.5	9.4	11	45	.41	10	157
2	7.8	1.3	3.4	2.8	7.6	3.1	8.9	9.2	27	.33	39	27
3	2.2	1.7	2.8	2.4	5.0	6.6	8.0	8.5	31	.53	149	14
4	1.4	19	2.0	1.9	4.3	63	6.9	7.4	27	.63	162	10
5	.93	9.0	2.2	1.9	e4.0	47	9.2	6.7	19	1.2	80	8.2
6	.78	9.8	1.5	12	e3.8	35	8.5	4.9	14	.00	27	20
7	.72	6.5	1.8	32	e3.7	17	5.7	4.7	12	.00	14	9.8
8	.73	5.2	.75	32	e3.5	14	5.0	4.4	10	.06	14	23
9	.73	12	.80	24	e3.4	15	3.7	4.2	4.9	1.5	23	27
10	.69	35	.74	10	e3.3	28	2.7	2.7	4.4	2.8	15	9.4
11	.66	10	.54	5.6	e3.2	31	2.9	1.7	2.9	1.8	22	6.0
12	.93	13	.58	7.3	e3.3	25	4.6	.53	15	1.3	8.0	4.2
13	1.2	12	.83	3.3	e3.8	18	3.5	.54	17	.31	5.7	31
14	1.1	7.0	1.6	e2.7	e4.1	23	3.0	.80	9.4	.00	2.4	18
15	1.2	7.8	.87	2.3	e4.0	26	2.7	.22	7.1	.00	1.1	11
16	1.2	46	.63	1.9	e3.8	17	2.8	.49	8.3	.34	1.1	7.3
17	3.8	14	.84	1.6	e3.4	32	4.1	.42	6.5	.42	1.1	5.6
18	3.3	7.3	1.2	1.5	e3.1	32	3.4	.46	5.4	13	.67	4.3
19	1.9	16	1.4	2.1	e3.1	20	2.7	5.3	3.0	49	.39	3.8
20	1.6	9.0	5.4	2.8	e3.4	21	2.1	3.3	2.1	32	8.0	2.7
21	2.2	5.9	1.2	1.2	e3.7	16	1.5	1.9	1.9	26	1.4	2.0
22	2.0	6.9	11	1.2	e3.5	13	1.2	.99	1.6	17	1.6	1.6
23	7.8	8.1	23	.93	e3.1	11	1.0	.67	.67	11	1.0	1.0
24	4.1	6.9	7.3	.95	e3.0	9.4	.91	.39	1.9	9.0	1.0	1.2
25	2.6	5.4	3.5	2.2	e2.9	9.5	28	16	2.2	7.0	.98	1.6
26	2.1	34	2.5	8.4	e2.8	9.2	12	3.4	1.5	7.5	.64	1.3
27	1.9	26	68	5.1	e2.7	10	7.6	1.0	1.3	15	.60	.77
28	1.6	14	34	4.0	e2.5	15	40	.78	2.3	4.4	36	.25
29	1.5	9.6	14	14	---	18	22	23	.74	6.8	15	.01
30	1.5	10	10	12	---	13	15	12	.23	49	6.0	.33
31	1.5	---	6.3	11	---	11	---	37	---	29	2.9	---
TOTAL	62.46	370.1	215.98	215.68	108.0	611.3	229.01	174.59	285.34	287.33	650.56	409.36
MEAN	2.01	12.3	6.97	6.96	3.86	19.7	7.63	5.63	9.51	9.27	21.0	13.6
MAX	7.8	46	68	32	10	63	40	37	45	49	162	157
MIN	.66	1.3	.54	.93	2.5	2.5	.91	.22	.23	.00	.39	.01
CFSM	.10	.58	.33	.33	.18	.93	.36	.27	.45	.44	.99	.65
IN.	.11	.65	.38	.38	.19	1.08	.40	.31	.50	.51	1.15	.72

CAL YR 1988 TOTAL 5134.34 MEAN 14.0 MAX 243 MIN .00 CFSM .66 IN. 9.05
WTR YR 1989 TOTAL 3619.73 MEAN 9.92 MAX 162 MIN .00 CFSM .47 IN. 6.38

e Estimated

05535500 WEST FORK OF NORTH BRANCH CHICAGO RIVER AT NORTHBROOK, IL

LOCATION.--Lat 42°08'18", long 87°50'04", in SW1/4SE1/4 sec.4, T.42 N., R.12 E., Cook County, Hydrologic Unit 07120003, on left bank at upstream side of bridge on State Highway 68 at Northbrook and at mile 7.9.

DRAINAGE AREA.--11.5 mi^2.

PERIOD OF RECORD.--August 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 637.98 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plant.

AVERAGE DISCHARGE.--37 years, 13.1 ft^3/s, 15.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s, Aug. 14, 1987, gage height, 10.10 ft; no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 320 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	0615	*536	*7.22	Sept. 1	0315	454	6.71

Minimum daily discharge, 3.4 ft^3/s, Dec. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	4.2	6.0	5.6	9.7	3.8	7.8	7.8	37	6.0	8.3	150
2	24	4.1	5.4	5.1	7.9	4.0	7.7	8.8	15	4.8	6.4	25
3	7.2	4.4	5.2	5.0	6.7	9.6	7.9	7.1	26	5.1	5.8	12
4	7.4	38	4.3	4.5	5.7	42	7.4	6.3	16	4.5	211	8.3
5	4.8	15	4.5	4.8	5.4	19	7.0	6.2	11	5.0	85	8.3
6	4.4	17	4.5	15	5.4	11	7.4	5.5	8.7	5.0	25	25
7	4.2	10	4.2	30	5.2	8.7	6.4	4.9	7.1	5.3	15	13
8	4.1	9.0	4.1	24	5.0	7.9	8.7	5.0	6.8	4.8	10	36
9	4.9	28	4.1	9.6	4.8	9.6	6.3	4.9	6.1	6.2	10	32
10	4.3	40	4.1	6.6	4.7	16	5.4	4.7	5.9	5.2	7.1	13
11	4.2	15	3.5	6.2	4.5	21	5.4	4.7	5.4	5.3	7.0	9.9
12	3.8	22	3.5	8.9	4.3	18	5.6	4.7	18	14	7.2	7.9
13	3.8	15	4.0	5.7	5.8	13	5.3	4.8	9.5	5.7	5.6	36
14	4.1	11	4.1	5.0	6.1	19	5.1	4.3	7.7	5.4	5.9	16
15	4.0	13	3.8	4.6	5.8	21	4.8	4.5	6.6	4.9	5.5	11
16	3.9	67	3.6	4.5	5.0	14	6.5	4.4	6.9	4.4	4.9	8.3
17	18	17	3.7	4.3	4.6	36	6.2	4.7	5.9	5.3	5.0	6.7
18	6.5	10	3.4	4.5	4.3	30	7.0	4.6	5.4	34	4.7	6.3
19	4.5	23	4.1	4.9	4.1	18	5.7	11	5.5	67	4.5	5.9
20	4.2	12	6.9	4.8	4.5	19	5.3	6.3	5.6	40	14	5.7
21	6.9	9.9	4.4	4.6	5.3	15	5.0	4.7	6.0	26	5.2	5.6
22	4.9	7.6	21	4.1	4.7	12	4.7	4.6	5.9	11	9.6	5.7
23	18	7.6	16	4.2	4.1	11	4.2	4.5	5.7	7.1	5.6	5.9
24	7.0	6.0	8.5	4.4	4.0	9.7	4.4	4.4	5.4	6.4	5.1	4.2
25	5.4	5.2	5.8	6.5	4.0	8.8	26	18	5.4	5.6	4.4	4.7
26	4.5	29	5.4	8.1	4.2	8.1	9.8	6.2	5.6	5.4	4.2	4.3
27	4.9	16	73	6.3	4.2	8.2	6.8	4.2	5.2	5.9	4.0	4.3
28	5.4	10	24	6.6	4.2	15	27	3.8	4.2	5.2	46	4.0
29	4.4	7.9	13	14	---	12	17	17	5.3	18	10	4.3
30	3.9	6.7	8.2	12	---	10	9.7	6.7	6.9	40	6.6	4.3
31	4.3	---	6.8	10	---	8.8	---	45	---	12	5.9	---
TOTAL	199.1	480.6	273.1	244.4	144.2	459.2	243.5	234.3	271.7	380.5	554.5	483.6
MEAN	6.42	16.0	8.81	7.88	5.15	14.8	8.12	7.56	9.06	12.3	17.9	16.1
MAX	24	67	73	30	9.7	42	27	45	37	67	211	150
MIN	3.8	4.1	3.4	4.1	4.0	3.8	4.2	3.8	4.2	4.4	4.0	4.0
CFSM	.56	1.39	.77	.69	.45	1.29	.71	.66	.79	1.07	1.56	1.40
IN.	.64	1.55	.88	.79	.47	1.49	.79	.76	.88	1.23	1.79	1.56

CAL YR 1988 TOTAL 4242.4 MEAN 11.6 MAX 167 MIN 2.8 CFSM 1.01 IN. 13.72
WTR YR 1989 TOTAL 3968.7 MEAN 10.9 MAX 211 MIN 3.4 CFSM .95 IN. 12.84

ILLINOIS RIVER BASIN

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL

LOCATION.--Lat 42°00'44", long 87°47'45", in SW1/4SE1/4 sec.30, T.41 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Touhy Avenue in Niles, 3.6 mi downstream from West Fork of North Branch, 7.9 mi upstream from North Shore Channel, and at mile 51.4.

DRAINAGE AREA.--100 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1207, 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 601.99 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plants. Gage-height telemeter at station.

AVERAGE DISCHARGE.--39 years, 96.1 ft^3/s, 13.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,590 ft^3/s, Aug. 14, 1987, gage height, 11.35 ft; minimum daily, 0.1 ft^3/s, Sept. 30, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1745	1,120	7.55	Aug. 4	1215	*1,780	*9.45

Minimum daily discharge, 19 ft^3/s, Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	25	52	68	79	33	74	69	549	42	76	703
2	93	25	47	55	70	34	72	67	227	40	56	441
3	62	25	43	48	62	45	74	63	182	38	45	167
4	46	131	37	44	45	151	62	56	153	40	1420	109
5	38	108	33	42	e45	152	64	59	111	39	1060	75
6	32	100	34	77	e50	112	62	51	85	42	523	117
7	27	76	29	106	e47	89	61	48	61	46	302	105
8	26	59	27	195	e45	70	62	43	43	46	219	80
9	25	88	26	116	e44	69	62	44	37	46	191	194
10	24	239	26	80	e42	88	53	41	31	46	263	119
11	20	133	24	63	e40	125	48	39	27	71	91	84
12	19	123	24	66	e45	135	49	37	108	104	67	51
13	26	131	25	57	60	119	48	36	66	49	71	136
14	24	86	24	57	54	120	48	34	49	35	93	111
15	23	79	23	45	45	165	47	33	50	40	50	89
16	25	408	23	42	43	123	47	34	33	33	44	67
17	386	187	25	41	40	142	52	32	38	34	41	52
18	225	111	23	32	38	203	54	36	32	138	40	46
19	45	139	22	43	36	134	54	63	31	600	38	45
20	31	112	26	41	37	125	51	59	33	422	76	42
21	34	83	28	39	40	115	48	39	34	188	51	40
22	31	66	60	37	40	100	47	34	38	125	51	39
23	62	53	124	37	38	90	43	33	47	81	52	34
24	57	47	67	38	39	79	42	33	38	52	43	33
25	39	41	49	39	43	70	107	61	36	58	39	30
26	34	100	40	50	36	68	101	55	36	39	37	31
27	28	128	218	50	35	64	76	45	40	50	36	29
28	27	89	216	51	36	103	133	37	39	46	213	29
29	27	68	121	83	---	112	130	104	38	87	136	28
30	25	59	104	88	---	93	98	82	40	331	72	26
31	23	---	85	83	---	83	---	156	---	136	61	---
TOTAL	1605	3119	1705	1913	1274	3211	1969	1623	2332	3144	5557	3152
MEAN	51.8	104	55.0	61.7	45.5	104	65.6	52.4	77.7	101	179	105
MAX	386	408	218	195	79	203	133	156	549	600	1420	703
MIN	19	25	22	32	35	33	42	32	27	33	36	26
CFSM	.52	1.04	.55	.62	.45	1.04	.66	.52	.78	1.01	1.79	1.05
IN.	.60	1.16	.63	.71	.47	1.19	.73	.60	.87	1.17	2.07	1.17

CAL YR 1988 TOTAL 30661 MEAN 83.8 MAX 796 MIN 19 CFSM .84 IN. 11.41
WTR YR 1989 TOTAL 30604 MEAN 83.8 MAX 1420 MIN 19 CFSM .84 IN. 11.38

e Estimated

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HCC 07.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING DEPTH (FEET) (00003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)
OCT												
13...	0830	17002	17002	27	--	--	842	8.00	7.5	11	9.4	20
NOV												
10...	1300	17002	17002	253	--	--	645	6.80	9.5	18	8.1	43
JAN												
06...	0900	17002	17002	80	--	--	2040	7.20	3.5	12	9.5	25
FEB												
09...	1230	17002	17002	41	--	--	1740	7.90	0.0	3.0	10.7	28
APR												
07...	0900	17002	17002	71	--	--	1420	7.80	8.5	9.9	9.9	24
MAY												
11...	0830	17002	17002	40	--	--	1240	7.80	11.5	6.9	9.3	28
JUN												
06...	1400	17002	17002	53	--	--	1020	--	21.5	11	--	32
JUL												
21...	0825	17002	17002	182	--	--	880	7.40	20.0	30	6.0	37
AUG												
01...	0918	81700	81700	--	1.00	39.0	801	7.70	21.0	--	4.2	--
01...	0919	81700	81700	--	1.00	36.0	794	7.70	21.0	--	4.4	--
01...	0920	81700	81700	--	1.00	33.0	793	7.70	21.0	--	4.4	--
01...	0921	81700	81700	--	1.00	30.0	795	7.70	21.0	--	4.3	--
01...	0922	81700	81700	--	1.00	27.0	791	7.70	21.0	--	4.3	--
01...	0923	81700	81700	--	1.00	24.0	793	7.70	21.0	--	4.3	--
01...	0924	81700	81700	--	1.00	21.0	795	7.60	21.0	--	4.3	--
01...	0925	81700	81700	--	1.00	18.0	797	7.60	21.0	--	4.3	--
01...	0926	81700	81700	--	1.00	15.0	800	7.60	21.0	--	4.3	--
01...	0927	81700	81700	--	1.00	12.0	812	7.60	21.0	--	4.3	--
01...	0928	81700	81700	--	1.00	9.00	812	7.60	21.0	--	4.3	--
01...	0929	81700	81700	--	1.00	6.00	797	7.60	21.0	--	4.3	--
01...	0930	81700	81700	--	1.00	3.00	787	7.60	21.0	--	4.3	--
01...	0945	81700	80020	80	--	--	804	8.26	--	--	--	--

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT												
13...	K2000	240	76	61	58	25	23	75	72	7.0	6.6	--
NOV												
10...	K7600	200	64	54	47	22	19	57	55	5.5	4.5	--
JAN												
06...	K2200	280	120	69	68	26	26	280	280	8.5	8.2	--
FEB												
09...	K1500	340	130	78	77	35	35	190	180	7.4	7.2	--
APR												
07...	350	370	170	85	83	40	39	160	160	4.3	4.6	--
MAY												
11...	K2500	320	120	83	72	40	35	130	110	6.2	5.9	--
JUN												
06...	K730	290	120	67	65	31	30	100	100	5.0	5.4	--
JUL												
21...	K2000	230	80	59	53	27	24	90	85	6.2	5.5	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	230	230	--	51	--	24	--	76	--	4.8	0

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)
OCT												
13...	--	--	164	72	110	0.9	--	--	--	443	17	3
NOV												
10...	--	--	132	62	82	0.4	--	--	--	349	110	8
JAN												
06...	--	--	160	78	450	0.5	--	--	--	1010	17	10
FEB												
09...	--	--	208	110	320	0.7	--	--	--	861	5	5
APR												
07...	--	--	196	110	270	0.5	--	--	--	781	14	5
MAY												
11...	--	--	200	94	210	0.7	--	--	--	645	13	7
JUN												
06...	--	--	168	76	170	0.4	--	--	--	554	42	14
JUL												
21...	--	--	152	69	140	0.4	--	--	--	469	51	12
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	182	149	--	59	120	--	0.50	4.6	439	350	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)
OCT												
13...	6.10	--	0.460	0.007	--	1.3	--	1.8	--	7.9	1.41	1.22
NOV												
10...	2.40	--	0.180	<0.001	--	1.5	--	1.7	--	4.1	0.530	0.340
JAN												
06...	3.90	--	0.770	0.001	--	1.3	--	2.1	--	6.0	0.620	0.570
FEB												
09...	6.60	--	0.320	0.002	--	0.88	--	1.2	--	7.8	1.32	1.26
APR												
07...	4.60	--	0.240	0.003	--	1.2	--	1.4	--	6.0	0.940	0.770
MAY												
11...	6.20	--	0.160	0.002	--	1.2	--	1.4	--	7.6	0.940	0.860
JUN												
06...	2.10	--	0.250	--	--	1.5	--	1.7	--	3.8	0.430	0.280
JUL												
21...	2.10	--	0.290	0.003	--	1.3	--	1.6	--	3.7	0.520	0.370
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	1.80	0.180	--	0.150	1.9	0.65	2.1	0.80	--	0.700	0.630

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
OCT											
13...	530	80	2	20	18	<0.5	<0.5	210	190	<3	<3
NOV											
10...	2700	120	2	40	19	<0.5	<0.5	120	100	<3	<3
JAN											
06...	330	<50	1	7	<5	<0.5	<0.5	150	150	<3	<3
FEB											
09...	140	80	1	30	27	<0.5	<0.5	180	170	<3	<3
APR											
07...	590	340	1	40	37	<0.5	<0.5	170	160	<3	<3
MAY											
11...	830	590	1	40	30	<1.0	<1	180	160	<3	<3
JUN											
06...	1100	280	2	50	44	<0.5	<0.5	140	140	<3	<3
JUL											
21...	1100	80	2	50	34	<0.5	<0.5	180	160	<3	<3
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	370	10	--	100	30	<10	<0.5	160	170	1	<1

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)
OCT											
13...	<5	<5	<5	<5	<5	<5	790	<50	<5	<5	46
NOV											
10...	8	<5	<5	<5	11	<5	3500	110	17	<5	120
JAN											
06...	<5	<5	<5	<5	7	<5	600	<50	10	<5	90
FEB											
09...	<5	<5	<5	<5	<5	<5	210	<50	<5	<5	59
APR											
07...	5	<5	<5	<5	<5	<5	430	<50	<5	<5	77
MAY											
11...	<5	<5	<5	<5	<5	<5	380	<50	<5	<5	64
JUN											
06...	<5	<5	<5	<5	<5	<5	1300	<50	8	<5	78
JUL											
21...	<5	<5	<5	<5	8	<5	1600	<50	9	<5	100
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	3	<5	--	<3	<10	<10	620	13	5	<10	70

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)
OCT											
13...	30	0.06	--	10	11	<3	<3.0	380	360	<5	<5
NOV											
10...	54	0.09	--	5	<5	<3	<3.0	320	300	<5	<5
JAN											
06...	62	0.48	--	7	<5	<3	<3.0	470	470	<5	<5
FEB											
09...	50	0.06	--	5	6	<3	<3.0	460	450	<5	<5
APR											
07...	59	<0.05	--	<5	<5	<3	<3.0	460	450	<5	<5
MAY											
11...	31	<0.05	--	<5	<5	<3	<3.0	460	400	<5	<5
JUN											
06...	27	<0.05	--	8	7	<3	<3.0	330	320	<5	<5
JUL											
21...	48	0.06	--	16	14	<3	<3.0	330	310	<5	<5
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	44	0.10	<0.1	4	<10	<1	<1.0	--	290	--	<6

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
13...	<50	<50	--	--	<0.005	--	4	<1	--	--	--
NOV											
10...	<100	110	--	--	<0.005	--	11	<1	--	--	--
JAN											
06...	<100	<100	--	--	0.010	--	12	2	--	--	--
FEB											
09...	<50	<50	--	--	<0.005	--	6	<1	--	--	--
APR											
07...	<50	<50	--	--	<0.005	--	6	2	--	--	--
MAY											
11...	<50	<50	--	--	<0.005	--	8	1	--	--	--
JUN											
06...	<50	<50	--	--	<0.005	--	6	<1	--	--	--
JUL											
21...	<100	<100	--	--	<0.005	--	6	1	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	30	25	6.8	6.4	<0.010	<0.01	--	--	15	3.2	100

05536215 THORN CREEK AT GLENWOOD, IL

LOCATION.--Lat 41°31'50", long 87°36'20", in SW1/4SE1/4 sec.9, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank 20 ft downstream from Baltimore and Ohio Chicago Terminal Railroad bridge, 0.7 mi north of Chicago Heights, 0.8 mi south of Glenwood, 1.0 mi upstream from Deer Creek, and at mile 9.2.

DRAINAGE AREA.--24.7 mi^2.

PERIOD OF RECORD.--May 1949 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1955. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Figures of discharge include about 13 ft^3/s pumped from ground-water sources for municipal supply and about 5 ft^3/s of ground-water pumpage for industrial use.

AVERAGE DISCHARGE.--40 years, 37.4 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s, Aug. 17, 1968, gage height, 11.26 ft; minimum daily, 6.0 ft^3/s, July 4, Aug. 21, Sept. 5, 11, 25, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	2115	778	9.14	June 1	0945	*1,710	*10.49

Minimum daily discharge, 17 ft^3/s, Aug. 4, 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	22	30	38	38	20	34	22	1110	26	21	178
2	78	22	29	36	32	20	52	21	290	25	21	50
3	23	22	28	35	30	31	113	21	182	23	18	34
4	20	102	28	33	28	124	98	21	99	21	17	30
5	19	43	27	59	28	78	59	33	62	21	30	28
6	19	41	27	92	27	48	46	23	47	21	19	86
7	19	33	27	154	26	37	39	22	39	21	17	47
8	19	28	26	146	24	33	36	21	35	21	17	57
9	19	117	26	63	23	33	31	25	33	20	19	69
10	20	217	26	50	23	38	29	22	30	20	18	48
11	19	64	25	43	24	53	27	21	28	21	19	36
12	19	107	25	49	24	51	26	19	45	45	18	32
13	19	97	25	40	31	41	25	21	31	22	18	78
14	19	60	25	37	28	41	25	20	28	20	25	55
15	20	67	24	35	27	39	25	20	27	18	24	42
16	32	249	24	34	25	33	24	21	26	20	19	35
17	243	86	25	33	24	59	30	21	25	19	18	31
18	106	54	24	32	24	71	34	19	23	143	19	29
19	34	151	25	31	23	45	27	97	24	208	18	27
20	26	88	25	32	24	42	24	56	23	73	28	27
21	29	61	24	31	28	39	23	31	23	57	19	26
22	26	49	94	30	24	35	23	26	22	37	33	26
23	59	42	97	30	22	31	23	25	43	29	23	26
24	30	38	59	29	21	31	22	24	24	26	20	25
25	26	34	44	37	22	30	22	104	22	23	19	25
26	25	44	40	43	23	28	20	43	22	22	19	25
27	23	49	127	37	22	27	20	31	204	22	19	25
28	23	37	87	35	19	96	63	27	59	20	21	25
29	22	34	57	40	---	102	29	99	36	20	29	25
30	21	32	48	41	---	52	23	55	29	64	19	25
31	22	---	42	40	---	40	---	75	---	24	31	---
TOTAL	1100	2090	1240	1465	714	1448	1072	1086	2691	1152	655	1272
MEAN	35.5	69.7	40.0	47.3	25.5	46.7	35.7	35.0	89.7	37.2	21.1	42.4
MAX	243	249	127	154	38	124	113	104	1110	208	33	178
MIN	19	22	24	29	19	20	20	19	22	18	17	25

CAL YR 1988 TOTAL 12657 MEAN 34.6 MAX 267 MIN 17
WTR YR 1989 TOTAL 15985 MEAN 43.8 MAX 1110 MIN 17

05536235 DEER CREEK NEAR CHICAGO HEIGHTS, IL

LOCATION.--Lat 41°31'15", long 87°35'25", in SE1/4NW1/4 sec.14, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Joe Orr Road, 0.4 mi east of Cottage Grove Avenue, 1.0 mi north of U.S. Highway 30, 1.5 mi northeast of Chicago Heights, and at mile 2.8.

DRAINAGE AREA.--23.1 mi^2.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 615.95 ft above National Geodetic Vertical Datum of 1929. See WSP 1707 or 1727 for history of changes prior to Aug. 13, 1958.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Undetermined amount of flow diverted for irrigation.

AVERAGE DISCHARGE.--41 years, 17.5 ft^3/s, 10.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft^3/s, July 13, 1957, gage geight, 11.75 ft; no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1230	*739	*11.36	No other peak greater than base discharge.			

Minimum daily discharge, 0.21 ft^3/s, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.2	6.5	13	16	e2.7	17	3.1	623	3.6	4.5	88
2	9.5	3.0	5.5	9.2	12	e2.9	17	2.9	477	3.5	3.7	54
3	1.7	10	13	7.8	9.5	e3.5	64	2.9	209	3.5	3.8	27
4	1.3	22	6.0	5.9	7.3	e25	82	2.6	125	2.4	3.7	16
5	1.3	15	4.0	9.6	e6.0	e60	44	4.4	63	2.4	5.5	10
6	1.1	12	4.1	46	e5.5	39	29	3.6	42	2.1	3.3	28
7	.93	10	4.3	106	e5.0	26	21	2.8	32	1.7	2.0	35
8	.84	11	2.5	167	e4.2	20	17	2.5	24	1.5	2.2	25
9	.63	36	2.1	54	e3.7	21	13	3.0	18	1.7	1.9	44
10	.57	152	2.0	39	e3.4	38	10	2.7	13	2.2	4.6	34
11	.42	50	1.7	23	e3.0	52	8.9	2.1	9.7	1.7	2.3	19
12	.35	32	1.6	25	e2.9	41	8.1	2.1	15	7.0	2.0	12
13	.29	71	1.8	15	e3.2	26	7.0	2.0	12	2.6	2.0	28
14	.21	35	2.0	11	e3.7	22	6.5	1.9	8.0	1.5	4.2	37
15	.36	21	1.7	8.9	e3.4	23	6.4	1.8	6.3	1.4	5.0	26
16	2.1	71	1.4	6.0	e3.1	18	6.0	1.7	5.4	1.3	2.6	16
17	29	58	e1.3	6.1	e2.9	16	6.4	1.7	4.9	1.2	1.7	11
18	26	31	1.4	6.2	e2.8	30	6.4	1.9	4.2	17	1.7	8.2
19	8.0	70	1.6	6.5	e2.8	24	6.5	12	3.7	161	1.5	6.4
20	5.5	70	2.5	7.8	e3.0	18	5.5	21	3.2	61	3.3	5.3
21	4.3	42	2.5	6.2	e3.3	16	5.0	8.6	3.1	69	2.3	3.7
22	3.3	27	9.4	4.9	e3.0	14	4.7	4.5	3.4	33	5.7	1.2
23	9.0	20	75	4.1	e2.8	11	4.2	7.9	6.2	18	4.4	4.0
24	6.7	23	41	4.0	e2.6	9.8	4.0	8.0	3.7	12	2.4	4.7
25	3.8	13	22	8.1	e2.7	8.9	4.5	30	2.0	8.7	1.8	6.4
26	2.8	17	11	18	e2.9	7.8	3.8	16	1.8	7.0	1.4	3.9
27	3.3	18	36	18	e2.8	7.1	3.9	7.2	44	6.4	1.3	3.8
28	3.2	12	50	14	e2.7	37	11	4.0	32	4.4	2.2	1.9
29	3.4	8.7	33	15	---	84	6.7	37	9.0	3.8	2.8	1.6
30	3.2	7.4	24	21	---	35	3.8	38	5.0	18	1.9	2.0
31	3.3	---	17	20	---	23	---	26	---	6.8	2.2	---
TOTAL	137.90	971.3	387.9	706.3	126.2	761.7	433.3	265.9	1808.6	467.4	89.9	563.1
MEAN	4.45	32.4	12.5	22.8	4.51	24.6	14.4	8.58	60.3	15.1	2.90	18.8
MAX	29	152	75	167	16	84	82	38	623	161	5.7	88
MIN	.21	3.0	1.3	4.0	2.6	2.7	3.8	1.7	1.8	1.2	1.3	1.2
CFSM	.19	1.40	.54	.99	.20	1.06	.63	.37	2.61	.65	.13	.81
IN.	.22	1.56	.62	1.14	.20	1.23	.70	.43	2.91	.75	.14	.91

CAL YR 1988 TOTAL 4935.81 MEAN 13.5 MAX 280 MIN .07 CFSM .58 IN. 7.95
WTR YR 1989 TOTAL 6719.50 MEAN 18.4 MAX 623 MIN .21 CFSM .80 IN. 10.82

e Estimated

05536255 BUTTERFIELD CREEK AT FLOSSMOOR, IL

LOCATION.--Lat 41°32'25", long 87°38'55", in NE1/4NW1/4 sec.8, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of Reigle Road Bridge at Homewood city limits, 0.1 mi north of Holbrook Road, 0.8 mi east of Flossmoor, and at mile 1.2.

DRAINAGE AREA.--23.5 mi^2.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1948(M), 1953, 1955. WDR IL-75-1: Drainage area. WDR IL-81-2: 1955(M), 1957(M), 1968(M), 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 616.80 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--41 years, 17.5 ft^3/s 10.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft^3/s, May 22, 1982, gage height, 11.97 ft; no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 10	0100	437	8.12	June 1	1500	*870	*10.63

No flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	2.2	7.7	14	10	e1.2	9.2	2.2	651	4.8	3.7	139
2	28	1.9	6.8	11	7.5	e1.1	13	1.8	325	3.8	2.4	33
3	6.0	1.7	6.7	9.7	e5.6	e1.4	38	1.6	171	2.8	1.6	12
4	1.6	21	6.8	8.6	e3.9	e35	40	1.3	96	2.2	1.4	6.8
5	.62	10	5.9	13	e1.9	e70	20	4.2	50	1.9	5.8	4.6
6	.38	7.4	5.4	56	e1.7	e36	17	2.5	35	1.6	2.2	49
7	.19	6.3	5.0	124	e1.7	27	13	1.4	28	1.4	1.1	35
8	.06	4.7	4.4	136	e1.5	20	9.8	1.2	21	1.1	.76	23
9	.00	53	3.6	50	e1.3	16	8.1	2.1	17	.97	1.9	42
10	.00	228	3.5	33	e1.3	17	6.0	1.2	12	.83	1.3	25
11	.00	45	3.2	20	e1.3	20	5.3	.95	7.8	.59	3.0	12
12	.00	60	e3.0	22	e1.4	18	5.1	.88	17	13	.96	7.3
13	.00	91	e3.2	18	e1.5	14	4.8	.87	11	4.1	2.3	29
14	.00	35	4.2	18	e1.8	14	4.7	.84	7.7	2.5	6.3	25
15	.00	45	3.9	10	e1.7	16	4.6	1.5	6.8	1.3	12	14
16	.00	219	2.8	12	e1.5	11	4.4	.89	9.0	.94	4.4	8.7
17	110	60	2.7	6.1	e1.4	27	5.3	.80	6.2	.75	1.5	5.9
18	108	31	2.8	5.8	e1.3	73	8.3	.80	4.8	33	.99	4.5
19	14	111	3.0	5.9	e1.3	27	6.2	e5	4.3	170	.63	3.5
20	4.8	55	3.4	6.0	e1.4	20	4.6	18	3.9	40	4.6	2.7
21	5.0	29	3.3	6.2	e1.6	17	4.0	4.5	4.5	34	1.3	2.3
22	3.6	21	28	7.2	e1.5	12	3.8	2.3	5.4	17	5.7	2.0
23	15	21	67	4.7	e1.4	9.5	5.9	1.5	4.1	8.9	4.2	2.1
24	9.6	14	27	4.7	e1.2	8.3	4.4	1.1	2.9	5.1	2.5	2.2
25	4.8	12	16	7.0	e1.4	7.2	3.2	75	2.5	3.8	1.0	2.2
26	3.3	16	16	19	e1.4	6.6	2.8	22	2.3	3.1	.74	2.0
27	2.3	22	57	13	e1.4	6.7	2.4	7.4	48	2.0	.48	1.7
28	1.9	14	47	10	e1.3	36	17	4.2	23	1.5	3.0	1.5
29	2.2	11	37	11	---	30	6.9	27	8.5	1.2	17	1.4
30	3.0	8.6	34	13	---	17	3.4	15	6.1	19	6.2	1.4
31	2.7	---	21	13	---	12	---	13	---	6.2	5.9	---
TOTAL	327.41	1256.8	441.3	687.9	62.2	627.0	281.2	223.03	1591.8	389.38	106.86	500.8
MEAN	10.6	41.9	14.2	22.2	2.22	20.2	9.37	7.19	53.1	12.6	3.45	16.7
MAX	110	228	67	136	10	73	40	75	651	170	17	139
MIN	.00	1.7	2.7	4.7	1.2	1.1	2.4	.80	2.3	.59	.48	1.4
CFSM	.45	1.78	.61	.94	.09	.86	.40	.31	2.26	.53	.15	.71
IN.	.52	1.99	.70	1.09	.10	.99	.45	.35	2.52	.62	.17	.79

CAL YR 1988 TOTAL 5327.90 MEAN 14.6 MAX 228 MIN .00 CFSM .62 IN. 8.43
WTR YR 1989 TOTAL 6495.68 MEAN 17.8 MAX 651 MIN .00 CFSM .76 IN. 10.28

e Estimated

05536265 LANSING DITCH NEAR LANSING, IL

LOCATION.--Lat 41°31'40", long 87°31'45", at north boundary of sec.17, T.35 N., R.15 E., Cook County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on 202nd Street, 0.2 mi west of Indiana State line, 0.5 mi east of Burnham Avenue, 2 mi south of Lansing, and at mile 2.7.

DRAINAGE AREA.--8.84 mi^2.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-79-2: 1975-78.

GAGE.--Water-stage recorder. Datum of gage is 607.16 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 20, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by pumping operations above station.

AVERAGE DISCHARGE.--41 years, 7.92 ft^3/s, 12.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 461 ft^3/s, May 10 or 11, 1948, gage height, 9.24 ft, from floodmark; maximum gage height, 10.18 ft, Oct. 11, 1954; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	0945	*142	*9.00	No other peak greater than base discharge.			

No flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	7.1	.60	e1.1	e3.5	e.62	8.2	6.8	123	3.9	4.2	25
2	1.1	2.3	e.46	e.80	e3.0	e.67	8.3	4.1	77	3.8	4.0	8.1
3	.00	5.7	e.37	e.60	e2.0	e1.4	25	4.3	58	3.8	3.9	5.6
4	.00	13	e.35	e.50	e1.7	17	35	3.9	43	3.8	3.9	4.8
5	.00	11	e.30	e1.5	e1.4	34	24	3.1	28	3.7	4.6	1.7
6	.00	11	e.27	e13	e1.2	34	12	3.7	35	4.5	4.0	12
7	.00	4.2	e.23	e30	e1.1	20	9.4	3.6	36	4.9	3.8	9.4
8	.00	8.5	e.22	e43	e1.0	13	5.9	3.5	19	4.9	3.8	8.2
9	.00	10	e.13	e15	e.87	14	4.2	4.6	23	5.4	4.0	13
10	.00	66	e.11	e9.0	e.77	27	9.5	3.3	5.2	5.1	3.9	9.2
11	.03	e5.0	e.09	e7.0	e.72	34	3.5	3.4	4.9	5.2	3.8	7.1
12	.01	e7.0	e.06	e6.5	e.68	21	3.3	3.4	9.7	7.3	3.8	6.2
13	.02	e10	e.05	e5.0	e.78	19	6.5	3.4	6.7	4.3	3.8	13
14	.05	e1.8	e.04	e3.0	e.88	18	3.3	3.2	5.0	4.1	4.7	13
15	.03	e4.5	e.03	e2.0	e.80	11	4.0	3.0	4.6	4.2	5.2	9.8
16	.33	e5.4	e.04	e1.5	e.74	14	2.4	2.8	4.4	4.4	3.9	7.5
17	11	e3.7	e.06	e1.2	e.66	7.9	6.2	3.4	4.1	4.5	3.8	6.3
18	18	e2.7	e.03	e1.2	e.65	19	6.0	3.2	3.9	12	3.7	5.9
19	9.5	e5.7	e.10	e1.2	e.70	12	1.9	27	3.9	44	3.7	5.3
20	5.1	e4.5	e.22	e1.2	e.78	12	6.1	37	3.7	24	4.9	5.1
21	3.5	e2.5	e.21	e1.2	e.77	8.2	2.5	17	3.7	24	3.9	4.9
22	6.3	e1.5	e1.3	e1.2	e.70	7.4	3.5	12	3.6	12	6.4	5.0
23	3.8	e1.0	e6.0	e1.2	e.64	7.6	2.4	8.6	4.0	7.3	5.1	4.8
24	6.0	e.80	e3.5	e1.1	e.61	6.9	5.5	3.0	3.8	5.8	4.0	4.9
25	9.8	e.74	e2.0	e1.7	e.66	5.5	.52	36	3.8	5.2	3.8	4.7
26	2.7	e2.5	e.94	e3.5	e.68	3.3	6.5	18	3.8	2.8	3.9	4.7
27	5.8	e3.2	e3.0	e3.3	e.67	7.0	2.2	10	20	4.1	4.1	4.8
28	5.2	e1.5	e4.0	e2.8	e.66	9.2	13	6.8	12	4.5	3.9	3.8
29	4.8	e1.1	e3.0	e3.5	---	35	4.7	17	6.0	4.2	4.0	5.1
30	1.9	e.75	e2.0	e5.0	---	21	2.6	19	4.3	9.0	3.9	5.2
31	2.6	---	e1.5	e4.5	---	13	---	16	---	4.8	4.6	---
TOTAL	97.57	204.69	31.21	173.30	29.32	453.69	228.12	294.1	563.1	241.5	129.0	224.1
MEAN	3.15	6.82	1.01	5.59	1.05	14.6	7.60	9.49	18.8	7.79	4.16	7.47
MAX	18	66	6.0	43	3.5	35	35	37	123	44	6.4	25
MIN	.00	.74	.03	.50	.61	.62	.52	2.8	3.6	2.8	3.7	1.7
CFSM	.36	.77	.11	.63	.12	1.66	.86	1.07	2.12	.88	.47	.85
IN.	.41	.86	.13	.73	.12	1.91	.96	1.24	2.37	1.02	.54	.94

CAL YR 1988 TOTAL 2058.05 MEAN 5.62 MAX 71 MIN .00 CFSM .64 IN. 8.66
WTR YR 1989 TOTAL 2669.70 MEAN 7.31 MAX 123 MIN .00 CFSM .83 IN. 11.23

e Estimated

05536275 THORN CREEK AT THORNTON, IL

LOCATION.--Lat 41°34'05", long 87°36'30", in SE1/4NW1/4 sec.34, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Margaret Street in Thornton, 1.0 mi downstream from North Creek, and at mile 4.2.

DRAINAGE AREA.--104 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1707: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. Some diurnal fluctuation caused by pumping operations above station. Figures of discharge include about 16 ft^3/s pumped from ground-water sources for municipal supply and an undetermined amount of ground-water pumpage for industrial use. Gage-height telemeter at station.

AVERAGE DISCHARGE.--41 years, 101 ft^3/s, 13.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft^3/s, July 13, 1957, gage height, 16.00 ft; maximum gage height, 17.06 ft, June 14, 1981; minimum daily discharge, 4.4 ft^3/s, Sept. 11, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1947, reached a stage of 14.34 ft (from floodmark), discharge, 4,200 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	2400	*3,000	14.82	No other peak greater than base discharge.			

Minimum daily discharge, 21 ft^3/s, Oct. 1, 6, 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	36	65	84	98	37	109	47	1720	48	47	472
2	149	35	55	69	78	34	113	45	2520	45	40	259
3	53	39	50	59	68	42	267	44	1150	38	35	106
4	28	187	52	52	54	252	352	43	766	34	32	68
5	24	158	43	66	53	355	233	65	351	32	55	52
6	21	119	40	245	52	212	169	50	208	29	46	167
7	22	99	41	359	48	151	130	43	183	27	34	177
8	22	78	39	632	47	121	109	41	153	28	28	123
9	23	142	36	253	41	116	91	44	110	29	30	200
10	23	740	35	162	40	166	73	40	94	27	33	163
11	23	389	32	118	41	237	65	36	65	26	33	97
12	22	257	30	148	41	224	58	32	96	84	38	68
13	21	390	30	130	48	168	56	33	91	46	34	152
14	21	242	31	109	54	143	55	33	63	32	38	168
15	22	180	30	85	49	144	54	35	53	29	68	126
16	48	574	28	65	45	117	51	33	49	30	45	90
17	209	372	27	69	41	125	57	31	49	28	33	68
18	503	201	26	99	41	311	77	31	45	77	29	54
19	146	381	25	97	41	192	72	140	39	813	30	47
20	67	368	26	108	42	148	54	248	35	325	53	44
21	59	236	29	92	48	135	48	136	34	283	36	44
22	54	167	84	60	46	115	46	79	36	169	52	41
23	115	132	346	57	42	96	47	54	62	99	50	36
24	98	114	205	59	37	86	48	54	43	67	38	37
25	59	97	127	63	40	80	46	290	36	52	30	36
26	52	103	79	121	42	76	43	212	29	46	31	34
27	45	137	241	116	42	66	42	110	291	44	30	27
28	41	102	284	110	40	168	125	69	219	38	36	27
29	38	82	172	99	---	342	95	190	86	37	62	26
30	40	74	127	103	---	206	56	211	56	129	47	32
31	39	---	101	105	---	142	---	162	---	65	39	---
TOTAL	2108	6231	2536	3994	1359	4807	2841	2681	8732	2856	1232	3041
MEAN	68.0	208	81.8	129	48.5	155	94.7	86.5	291	92.1	39.7	101
MAX	503	740	346	632	98	355	352	290	2520	813	68	472
MIN	21	35	25	52	37	34	42	31	29	26	28	26
CFSM	.65	2.00	.79	1.24	.47	1.49	.91	.83	2.80	.89	.38	.97
IN.	.75	2.23	.91	1.43	.49	1.72	1.02	.96	3.12	1.02	.44	1.09

CAL YR 1988 TOTAL 32807 MEAN 89.6 MAX 787 MIN 17 CFSM .86 IN. 11.73
WTR YR 1989 TOTAL 42418 MEAN 116 MAX 2520 MIN 21 CFSM 1.12 IN. 15.17

05536275 THORN CREEK AT THORNTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HBD 04.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
04...	1100	17002	17002	28	1000	8.10	14.5	10	7.9	42	K2200
NOV											
15...	1130	17002	17002	140	836	7.60	9.5	29	8.5	20	K630
JAN											
06...	1130	17002	17002	234	1670	7.80	3.0	46	11.5	32	K2000
FEB											
10...	1100	17002	17002	39	1510	7.80	1.0	4.7	12.1	24	K100
MAR											
24...	1000	17002	17002	84	1250	8.00	6.0	4.8	11.4	23	270
APR											
25...	1130	17002	17002	46	1260	7.80	16.5	4.7	10.3	41	300
MAY											
19...	1130	17002	17002	57	1240	7.90	17.0	26	6.8	46	K6100
JUN											
15...	0800	17002	17002	48	1120	7.30	17.0	30	5.8	30	K970
JUL											
21...	0900	17002	17002	280	614	8.60	19.0	86	6.4	44	110000

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT											
04...	310	310	74	70	35	33	93	90	7.1	6.8	140
NOV											
15...	340	340	80	80	34	34	54	55	5.9	5.8	120
JAN											
06...	240	240	61	57	23	24	230	220	6.5	6.1	92
FEB											
10...	480	480	100	110	51	52	120	130	7.7	--	240
MAR											
24...	400	400	93	92	41	41	110	110	5.5	5.5	170
APR											
25...	440	440	99	100	47	47	140	140	4.2	3.5	210
MAY											
19...	400	400	110	90	51	42	130	130	8.7	7.3	170
JUN											
15...	390	390	94	90	41	40	92	89	6.0	6.0	150
JUL											
21...	210	210	56	51	23	20	43	43	6.0	5.1	70

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05536275 THORN CREEK AT THORNTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT											
04...	110	450	26	9	5.60	0.260	0.009	2.86	2.74	470	<50
NOV											
15...	79	374	22	6	5.30	0.170	0.001	0.600	0.520	1400	180
JAN											
06...	400	803	48	12	2.20	1.40	0.010	1.24	1.07	1000	<50
FEB											
10...	210	733	6	1	7.30	0.120	<0.001	3.06	2.85	180	100
MAR											
24...	190	607	8	3	5.50	0.210	0.003	1.62	1.57	260	130
APR											
25...	170	673	3	1	7.50	0.030	<0.001	3.11	2.78	860	780
MAY											
19...	200	640	87	34	4.60	0.250	0.006	2.15	2.00	1700	880
JUN											
15...	150	526	44	12	5.10	0.160	0.001	2.83	2.71	1400	480
JUL											
21...	62	252	131	17	3.90	0.270	0.037	0.710	0.640	3400	50

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT											
04...	20	18	<0.5	<0.5	310	300	<3	<3	20	<5	<5
NOV											
15...	30	28	<0.5	<0.5	230	220	<3	<3	26	6	<5
JAN											
06...	8	<5	<0.5	<0.5	140	140	<3	<3	<5	<5	<5
FEB											
10...	30	28	<0.5	<0.5	310	--	<3	<3	7	<5	<5
MAR											
24...	30	27	<0.5	<0.5	210	210	<3	<3	5	--	<5
APR											
25...	30	34	<1.0	<1	340	340	<3	<3	<5	<5	<5
MAY											
19...	50	38	<0.5	<0.5	370	350	<3	<3	11	6	<5
JUN											
15...	50	40	<0.5	<0.5	300	290	<3	--	180	<5	<5
JUL											
21...	50	27	<0.5	<0.5	150	140	<3	--	9	<5	5

6

05536275 THORN CREEK AT THORNTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT 04...	<5	<5	<5	790	<50	<5	<5	49	26	13	<5
NOV 15...	<5	<5	<5	1400	77	8	<5	65	50	18	8
JAN 06...	<5	6	<5	1700	<50	17	<5	85	52	<5	<5
FEB 10...	<5	12	<5	290	<50	<5	<5	67	65	<5	<5
MAR 24...	<5	5	--	260	<50	<5	<5	66	63	6	5
APR 25...	<5	<5	<5	240	<50	<5	<5	65	58	<5	<5
MAY 19...	<5	8	5	1400	180	7	<5	150	90	17	7
JUN 15...	<5	10	<5	2000	88	6	<5	94	58	64	<5
JUL 21...	<5	14	<5	4200	73	10	<5	130	32	21	11

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 04...	<3	<3.0	310	290	<5	<5	<50	<50	<0.005	1
NOV 15...	<3	<3.0	270	270	<5	<5	<100	--	<0.005	<1
JAN 06...	<3	<3.0	250	240	<5	<5	<100	<100	0.010	<1
FEB 10...	<3	<3.0	440	--	<5	<5	<50	<50	<0.005	<1
MAR 24...	<3	<3.0	330	330	<5	<5	<50	<50	<0.005	<1
APR 25...	<3	<3.0	450	--	<5	<5	<50	<50	<0.005	8
MAY 19...	<3	<3.0	530	500	<5	<5	<100	<100	<0.005	<1
JUN 15...	<10	<10	370	350	<5	<5	<50	<50	<0.005	<1
JUL 21...	<3	<3.0	190	180	8	<5	<100	100	<0.005	<1

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'25", long 87°35'52", in NE1/4SE1/4 sec.15, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Cottage Grove Avenue in South Holland, 2.0 mi downstream from Thorn Creek, and at mile 23.0.

DRAINAGE AREA.--208 mi^2.

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953. WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 575.00 ft above National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage and Oct. 27, 1947, to Mar. 31, 1981, water-stage recorder at site 1.4 mi upstream at same datum. Apr. 1 to Nov. 8, 1981, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 4.7 mi downstream; prior to Nov. 17, 1947, nonrecording gage at the Dixmoor site read twice daily.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 6.6 mi below station, diverts the entire flow to the Mississippi River basin. Gage-height telemeter at station.

AVERAGE DISCHARGE.--42 years, 184 ft^3/s, 12.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft^3/s, July 14, 1957, gage height, 20.11 ft, site then in use; maximum gage height, 20.20 ft, June 14, 1981; minimum daily discharge, 7.9 ft^3/s Oct. 6, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft, from floodmarks, discharge, 4,760 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,390 ft^3/s, June 2, gage height, 18.58 ft; minimum daily, 27 ft^3/s, Oct. 13-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	54	94	131	139	60	179	72	2140	90	79	847
2	151	53	86	109	115	58	161	67	3260	82	63	573
3	92	54	78	97	104	67	345	65	2650	73	55	239
4	46	226	81	87	77	320	516	62	1780	67	51	152
5	37	227	71	103	e90	482	385	84	1070	59	79	115
6	35	148	66	333	e82	318	278	73	717	58	69	253
7	32	134	65	474	e75	223	212	68	600	50	47	324
8	31	108	63	891	e71	183	176	62	499	45	41	229
9	30	251	59	502	e67	165	148	67	382	51	64	321
10	30	1180	58	309	e65	231	120	61	316	50	76	290
11	28	704	54	245	e66	340	108	56	248	46	55	188
12	28	415	53	245	e70	343	95	51	283	143	54	137
13	27	579	54	196	e80	269	89	49	262	86	46	246
14	27	395	55	172	99	230	88	50	195	58	81	274
15	27	318	53	139	84	224	83	50	158	49	142	215
16	50	805	47	109	77	184	79	49	140	48	91	160
17	263	600	e44	107	70	204	81	44	122	49	65	130
18	835	305	e42	117	68	456	110	45	107	141	50	107
19	289	523	46	129	67	296	107	209	93	1120	45	88
20	137	536	53	126	67	225	84	448	81	661	87	74
21	102	368	51	125	79	199	75	240	74	505	63	75
22	87	272	113	94	76	163	71	146	70	340	68	68
23	121	213	499	88	63	139	71	106	89	211	91	56
24	146	174	334	87	64	124	71	91	69	146	69	56
25	96	151	215	94	67	113	68	507	59	112	56	54
26	83	147	152	157	71	105	65	344	54	92	49	54
27	74	185	330	154	69	97	61	188	326	77	46	45
28	66	146	434	148	67	234	124	124	398	67	63	41
29	60	120	267	135	---	502	124	357	160	58	78	e40
30	59	107	205	150	---	356	87	405	110	179	80	e49
31	57	---	160	153	---	239	---	278	---	118	59	---
TOTAL	3175	9498	3982	6006	2189	7149	4261	4518	16512	4931	2062	5500
MEAN	102	317	128	194	78.2	231	142	146	550	159	66.5	183
MAX	835	1180	499	891	139	502	516	507	3260	1120	142	847
MIN	27	53	42	87	63	58	61	44	54	45	41	40
CFSM	.49	1.52	.62	.93	.38	1.11	.68	.70	2.65	.76	.32	.88
IN.	.57	1.70	.71	1.07	.39	1.28	.76	.81	2.95	.88	.37	.98

CAL YR 1988 TOTAL 54856 MEAN 150 MAX 1290 MIN 16 CFSM .72 IN. 9.81
WTR YR 1989 TOTAL 69783 MEAN 191 MAX 3260 MIN 27 CFSM .92 IN. 12.48

e Estimated

05536340 MIDLOTHIAN CREEK AT OAK FOREST, IL

LOCATION.--Lat 41°36'51", long 87°43'46", in SE1/4NW1/4 sec.15, T.36 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Kilbourn Avenue in Oak Forest, and at mile 5.9.

DRAINAGE AREA.--12.6 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR-IL 1971-74).

REVISED RECORDS.--WSP 1337: 1951-53: WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.41 ft above National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by small industrial plants upstream. Retention pond 1.0 mi upstream detains water during periods of heavy runoff and gradually releases water during the recession. Flow bypassed gage from Nov. 21, 1962, to Mar. 2, 1963, due to diversion 1.0 mi upstream. Gage-height telemeter at station.

AVERAGE DISCHARGE.--39 years, 11.3 ft^3/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 627 ft^3/s, Apr. 22, 1973, gage height, 7.67 ft; maximum gage height, 9.00 ft, July 13, 1975; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1615	*330	*5.14	Sept. 1	0330	170	3.48

Minimum daily discharge, 0.43 ft^3/s, Oct. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	2.0	4.5	e5.0	9.9	2.9	8.4	3.1	219	1.7	2.8	102
2	8.8	2.5	3.8	e4.5	8.1	2.5	7.9	3.1	265	1.5	2.1	56
3	2.2	1.9	3.4	e4.0	e5.0	5.6	13	3.1	252	1.6	1.9	15
4	1.7	14	2.9	e3.5	e3.5	e23	16	2.8	217	1.4	3.1	6.9
5	1.4	23	2.7	e3.5	e3.3	e14	13	6.2	137	1.1	7.8	5.7
6	1.4	14	2.8	e10	e3.0	e10	11	3.1	49	1.2	3.4	16
7	1.2	12	2.5	e20	e2.8	e8.0	8.2	2.2	19	1.2	1.8	14
8	.79	9.4	2.6	e40	e2.5	e7.0	7.1	2.1	13	1.2	1.4	19
9	.49	24	2.5	e10	e2.2	7.4	5.6	3.1	10	1.2	3.6	99
10	.43	111	2.4	e45	e2.0	8.9	4.8	2.1	7.0	.99	1.8	53
11	1.7	54	1.8	e6.0	e2.1	10	4.8	1.6	5.3	1.4	2.5	26
12	13	28	1.8	e8.0	e2.1	10	4.3	1.4	23	8.6	4.8	13
13	1.8	32	2.2	e4.0	2.5	8.7	4.0	1.4	10	2.5	2.9	29
14	.46	28	3.0	e3.5	e2.5	9.4	3.9	1.4	6.0	1.8	7.1	21
15	1.0	38	e2.5	e3.0	e2.4	12	3.7	1.1	4.0	1.4	16	11
16	3.8	75	1.7	e7.0	e2.3	8.9	4.3	1.4	3.5	1.1	5.3	7.6
17	28	52	1.5	e6.0	e2.2	12	5.2	1.2	2.9	1.0	2.6	5.7
18	62	42	1.6	e4.0	e2.0	28	11	1.3	2.4	16	2.7	4.6
19	17	48	1.7	e2.5	2.2	17	11	12	2.5	59	2.5	4.1
20	7.2	37	1.8	e2.2	2.5	14	5.7	6.0	2.6	21	5.7	3.3
21	5.2	27	2.4	e2.0	3.1	13	5.5	2.2	2.5	12	3.1	2.6
22	3.5	27	2.8	e2.2	3.1	11	4.6	1.6	2.4	6.6	3.0	2.1
23	9.4	25	23	e2.5	2.6	9.0	3.8	1.5	2.2	3.7	3.3	1.4
24	8.6	21	e17	e2.7	2.6	8.1	3.0	1.5	2.0	2.8	2.4	1.4
25	4.1	15	e11	e3.5	3.2	7.4	3.3	47	1.8	2.3	1.5	1.3
26	2.9	20	e7.0	e4.5	2.4	6.3	3.5	21	6.6	2.1	1.8	1.3
27	2.5	21	e12	2.8	3.5	6.1	3.6	11	17	1.9	1.1	1.3
28	2.4	16	e17	3.3	4.1	28	13	5.4	4.9	1.6	1.5	1.3
29	2.2	14	e13	e12	---	26	6.4	16	2.8	1.9	1.1	1.2
30	1.9	8.6	e10	7.7	---	17	3.2	7.1	2.1	16	1.1	1.1
31	1.8	---	e7.0	15	---	11	---	10	---	5.2	2.2	---
TOTAL	199.61	842.4	171.9	249.9	89.7	362.2	202.8	184.0	1294.5	182.99	103.9	526.9
MEAN	6.44	28.1	5.55	8.06	3.20	11.7	6.76	5.94	43.1	5.90	3.35	17.6
MAX	62	111	23	45	9.9	28	16	47	265	59	16	102
MIN	.43	1.9	1.5	2.0	2.0	2.5	3.0	1.1	1.8	.99	1.1	1.1
CFSM	.51	2.23	.44	.64	.25	.93	.54	.47	3.42	.47	.27	1.39
IN.	.59	2.49	.51	.74	.26	1.07	.60	.54	3.82	.54	.31	1.56

CAL YR 1988 TOTAL 3574.83 MEAN 9.77 MAX 111 MIN .06 CFSM .78 IN. 10.55
WTR YR 1989 TOTAL 4410.80 MEAN 12.1 MAX 265 MIN .43 CFSM .96 IN. 13.02

e Estimated

05536500 TINLEY CREEK NEAR PALOS PARK, IL

LOCATION.--Lat 41°38'48", long 87°45'59", in SW1/4SE1/4 sec.32, T.37 N., R.13 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on 135th Street, 1.5 mi west of State Highway 50, 3 mi southeast of Palos Park, and at mile 1.8.

DRAINAGE AREA.--11.2 mi^2.

PERIOD OF RECORD.--July 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-81-2: 1955(M), 1957(M), 1970(M), 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 607.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 9.93 ft^3/s, 12.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft^3/s, Oct. 10, 1954, gage height, 10.30 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 18	0003	262	4.99	June 1	1730	*830	*8.13
Nov. 10	0400	403	5.96	Sept. 1	1030	252	5.16
Nov. 16	0600	249	4.89				

Minimum daily discharge, 0.11 ft^3/s, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	1.5	3.4	e3.5	8.7	e1.6	8.7	2.8	489	.89	4.1	121
2	24	1.3	2.6	e2.2	6.0	e1.5	8.1	2.4	218	.93	2.1	18
3	13	1.2	2.3	e1.8	e3.5	e1.4	20	2.3	83	1.0	1.7	4.9
4	3.7	42	1.8	e1.9	e2.7	e45	25	2.2	34	.95	1.8	2.4
5	1.7	38	1.8	e2.5	e2.3	e70	15	3.1	16	1.1	7.0	1.8
6	.95	17	1.6	e15	e2.1	e45	11	2.5	10	1.0	5.1	18
7	.60	13	1.5	e80	e1.8	e22	8.9	2.1	6.5	.62	2.2	15
8	.47	7.4	1.2	e45	e1.6	13	7.4	1.9	4.8	.78	1.3	37
9	.42	51	1.0	e17	e1.4	12	5.6	2.0	3.8	.73	3.0	66
10	.42	221	.93	e13	e1.5	19	4.3	1.7	3.2	.66	2.4	18
11	.32	30	.90	e6.0	e1.6	30	3.8	1.5	2.7	.56	1.8	8.1
12	.25	39	.79	e7.5	e1.6	25	3.6	1.5	18	4.9	7.1	4.3
13	.19	67	.88	e6.0	e1.7	20	3.2	1.5	13	2.4	3.5	19
14	.11	19	1.0	e4.0	e2.2	20	3.1	1.3	6.0	1.3	1.8	14
15	.12	50	.91	e3.0	e3.0	28	3.0	1.1	3.6	.94	2.7	6.6
16	5.6	139	.73	e2.5	e2.6	15	2.8	1.0	3.0	.82	2.4	3.8
17	39	32	.74	e2.1	e2.1	19	3.3	.82	2.3	.87	1.4	2.8
18	100	13	.82	e2.0	e1.9	42	7.8	.82	1.8	2.7	1.0	2.2
19	12	74	.84	e2.0	e1.7	21	10	11	1.5	57	.94	1.7
20	3.8	38	1.2	e1.9	e1.8	16	6.3	15	1.5	17	6.9	1.8
21	3.2	15	.89	e1.9	e2.0	14	4.5	4.5	1.4	12	3.2	1.7
22	3.2	8.7	11	e1.8	e1.8	10	3.9	2.3	1.4	7.1	4.3	1.8
23	12	6.2	84	e1.8	e1.6	8.4	3.4	1.6	1.3	3.9	3.8	1.6
24	14	5.1	23	e2.0	e1.5	7.2	3.0	1.4	1.3	2.4	2.1	1.4
25	5.3	4.3	12	e2.5	e1.6	6.6	2.8	47	1.2	1.8	1.3	1.2
26	3.7	14	14	19	e1.7	6.1	2.8	18	1.6	1.4	.96	1.1
27	2.6	20	107	11	e1.7	5.6	2.6	6.3	6.8	1.3	.78	1.1
28	3.2	9.2	e60	7.3	e1.6	39	8.3	3.1	2.7	.99	.70	1.5
29	5.6	8.0	e25	10	---	32	9.1	15	1.6	.73	.90	1.1
30	2.6	4.7	e15	12	---	17	4.5	11	1.2	24	.97	.99
31	1.7	---	e6.0	11	---	12	---	5.3	---	9.5	.76	---
TOTAL	264.59	989.6	384.83	299.2	65.3	624.4	205.8	174.04	942.2	162.27	80.01	379.89
MEAN	8.54	33.0	12.4	9.65	2.33	20.1	6.86	5.61	31.4	5.23	2.58	12.7
MAX	100	221	107	80	8.7	70	25	47	489	57	7.1	121
MIN	.11	1.2	.73	1.8	1.4	1.4	2.6	.82	1.2	.56	.70	.99
CFSM	.76	2.95	1.11	.86	.21	1.80	.61	.50	2.80	.47	.23	1.13
IN.	.88	3.29	1.28	.99	.22	2.07	.68	.58	3.13	.54	.27	1.26

CAL YR 1988 TOTAL 4331.21 MEAN 11.8 MAX 221 MIN .00 CFSM 1.06 IN. 14.39
WTR YR 1989 TOTAL 4572.13 MEAN 12.5 MAX 489 MIN .11 CFSM 1.12 IN. 15.19

e Estimated

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL

LOCATION.--Lat 41°38'26", long 88°03'38", in SE1/4SW1/4 sec.35, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on left bank 40 ft upstream from bridge on Romeoville Road in Romeoville, 5.2 mi upstream from Lockport Lock and Dam, and at mile 6.2.

DRAINAGE AREA.--739 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.
REVISED REORDS.--WDR IL-86-2: 1985.
GAGE.--Acoustical flowmeter. Datum of gage is 551.89 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).
REMARKS.--Records good except those for estimated daily discharges, which are fair. Estimated daily discharges determined from a regression relation developed by the U.S. Army Corps of Engineers between present site and the previous site 5.2 miles downstream.

This gaging station provides flow data essential to determine Illinois' diversion of Lake Michigan water. A U.S. Supreme Court Decree limits Illinois' diversion to an average of 3,200 ft^3/s. Illinois' diversion includes water diverted from the lake for domestic water supply, for navigation and water-quality improvement in the Chicago Sanitary and Ship Canal system, and the stormwater runoff from a 673 mi^2 diverted watershed area. Flows recorded at this station also include non-diversion flows. Gage-height telemeter at station.
AVERAGE DISCHARGE.--5 years, 3,699 ft^3/s.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 16,300 ft^3/s, Mar. 4, 1985; minimum daily, 1,770 ft^3/s, Jan. 10, 1986.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12,800 ft^3/s, June 1; minimum daily, 1,790 ft^3/s, Mar. 2.

REVISIONS.--Revised figures of discharge for the water year 1986, superseding those published in the report for 1986, are given below.

EXTREMES FOR WATER YEAR 1986.--Maximum daily discharge, 13,000 ft^3/s, Nov. 19; minimum daily, 1,810 ft^3/s, Jan. 10.

REMARKS FOR WATER YEAR 1986.-- Records good. Estimated daily discharges determined from a regression relation developed by the U.S. Army Corps of Engineers between present site and the previous site 5.2 miles downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3220	e6680	e6590	e2400	e3290	e2780	e3160	e3020	e4180	e4520	e5270	e3930
2	e3120	e6680	e5010	e2730	e2380	e2640	e2680	e2930	e3180	e4440	e5280	e3990
3	e5030	e4720	e4540	e2720	e4090	e2830	e2390	e2980	e2580	e4600	e4730	e4230
4	e3880	e3440	e3880	e2520	e6200	e2930	e2760	e2900	e3340	e4400	e4990	e3810
5	e3890	e3390	e3850	e2580	e5010	e3540	e2800	e2660	e6990	e4350	e4950	e4030
6	e3840	e3670	e3530	e2410	e4360	e4040	e2540	e3620	e4230	e4790	e5130	e3570
7	e2890	e3210	e2950	e2930	e3340	e3120	e2690	e2690	e6700	e3970	e4660	e3970
8	e4550	e2850	e2900	e3020	e3480	e2850	e2660	e2760	e4170	e6520	e4710	e3580
9	e5180	e6530	e2950	e2420	e2720	e3070	e2570	e2640	e3800	e6780	e4190	e3960
10	e3840	e7970	e3440	e1810	e3210	e5780	e2610	e2780	e5860	e5300	e4090	e3740
11	e3450	e5840	e3930	e2650	e2750	e4410	e2380	e3110	e5340	e7040	e4290	e5590
12	e4600	e5660	e3500	e2490	e2740	e4720	e2830	e2690	e3960	e7530	e4200	e4600
13	e3680	e4740	e3410	e2080	e3150	e4080	e2720	e3550	e3280	e4430	e4640	e5090
14	e3540	e3700	e2380	e2500	e2580	e3520	e3970	e3150	e5020	e4530	e4440	e4420
15	e3190	e5000	e2730	e2510	e2680	e3590	e3140	e4170	e4970	e6030	e3850	e4290
16	e3590	e6340	e3030	e2420	e3060	e3170	e2930	e3650	e5060	e4970	e4370	e4110
17	e3440	e5460	e2840	e2810	e2760	e3270	e2660	e8060	e4550	e5210	e3880	e3820
18	e6760	e8790	e3060	e2810	e4420	e4080	e2800	e6690	e4430	e5200	e3900	e3940
19	e11700	e13000	e2670	e2750	e5200	e3990	e2950	e7950	e4070	e4890	e4320	e4770
20	e4330	e11200	e3190	e3240	e5310	e4260	e2570	e4450	e3710	e5250	e4660	e4230
21	e4140	e6920	e2640	e2320	e3720	e3720	e3030	e3590	e4510	e4860	e4340	e5060
22	e3870	e5310	e2380	e2320	e3710	e3310	e2450	e3180	e3990	e5260	e4310	e5750
23	e5640	e5000	e2550	e2400	e2740	e3090	e2770	e3010	e4250	e5260	e4510	e5990
24	e4140	e4300	e3080	e2580	e3170	e2800	e2620	e3370	e3700	e5220	e4070	e7150
25	e4150	e3400	e2780	e2480	e2910	e2860	e3210	e3730	e3800	e6080	e4680	e5780
26	e4060	e3810	e3010	e2640	e2990	e2820	e3340	e2900	e3690	e5310	e5380	e9560
27	e3740	e3660	e2810	e2670	e3550	e2890	e3000	e4480	e5240	e5300	e4660	e6100
28	e3530	e2960	e2810	e2630	e2650	e2460	e3280	e3300	e5010	e5850	e4180	e7470
29	e3340	e3040	e2630	e2480	---	e2550	e3100	e3710	e4510	e5290	e4190	e9490
30	e3230	e3340	e3020	e2220	---	e2650	e7020	e3840	e5990	e5150	e4090	e9540
31	e3520	---	e2460	e2880	---	e2690	---	e3150	---	e5740	e4320	---
TOTAL	131080	160610	100550	79420	98170	104510	90230	114710	134110	164070	139280	155560
MEAN	4228	5354	3244	2562	3506	3371	3008	3700	4470	5293	4493	5185
MAX	11700	13000	6590	3240	6200	5780	7020	8060	6990	7530	5380	9560
MIN	2890	2850	2380	1810	2380	2460	2380	2640	2580	3970	3850	3570

CAL YR 1985 TOTAL 1479620 MEAN 4054 MAX 16300 MIN 2080
WTR YR 1986 TOTAL 1472300 MEAN 4034 MAX 13000 MIN 1810

e Estimated

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2720	1980	2300	2600	e2330	2250	2900	2170	12800	3060	4430	10500
2	4150	1970	2560	2210	e2280	1790	2640	2400	11400	3620	3820	5810
3	3440	e2090	1980	2350	e2320	2720	2970	2400	9770	3130	4300	5090
4	2400	e5130	2620	2440	2180	4710	2890	2570	6440	3210	8490	4100
5	2060	e3550	3540	2900	2160	4070	2810	2660	4390	3670	9420	4730
6	2930	e3850	3220	3840	2570	3020	2830	1890	4100	3250	5160	5470
7	2450	e2730	1950	3990	2020	2920	2840	2620	3840	3700	4710	6190
8	3010	e2690	2460	4410	2350	2870	2240	2060	3440	3590	4030	5750
9	2650	e5590	2000	3410	2240	2510	2530	2350	3150	3480	4090	6260
10	2410	e6590	2020	2650	1890	2810	2210	2200	3010	3600	5490	5400
11	2560	e5230	2060	2830	2310	2640	2330	2140	3190	4530	4880	5300
12	2680	e4750	2050	3020	2260	2830	2150	2280	e3940	3890	4680	4940
13	2650	e4810	2200	2410	2450	2870	2290	2080	e3940	3690	4520	4360
14	2310	e2930	2310	2470	2390	2840	2170	2240	e3570	3340	4230	5180
15	2730	e7070	1920	2230	2480	2110	2360	2090	2630	3450	3610	5330
16	3300	e6680	2220	2390	2260	3760	2540	2220	3260	3360	3870	5430
17	6780	e3970	2000	2450	2290	3430	2010	2200	3290	3150	3610	5090
18	5580	4040	2160	2170	2060	3410	2910	2590	2940	5310	3980	5230
19	4030	4990	2090	2360	2250	3760	2340	3590	2920	8070	3790	4700
20	3400	4540	2180	2180	2170	3400	2670	3030	3000	6400	4590	4890
21	2710	4420	1860	2340	2470	2700	1910	3000	3160	5190	4450	4620
22	3240	3810	3640	2280	2220	2870	2350	2800	3290	4660	e4510	4810
23	3640	3020	4610	1890	2180	2880	2150	2390	3410	4250	e3930	5030
24	3010	2330	3390	2220	2210	2400	2350	2900	3040	3700	3770	4620
25	2960	2510	2840	2520	2140	2390	2380	3710	3140	4080	3750	3780
26	3290	3410	2370	2670	2140	2600	2720	3060	3310	4020	4010	e2750
27	3020	2980	4970	2360	2190	2390	1830	2880	3820	5190	3730	e2730
28	2400	2810	4690	2440	2200	4050	3460	2320	3300	3740	5240	e2730
29	2400	2230	2740	2630	---	3080	2990	4560	4050	4640	3790	e2110
30	2490	2340	3450	2370	---	2970	2610	3900	3170	5200	3670	e2320
31	2580	---	2430	e2550	---	3000	---	4350	---	4440	4970	---
TOTAL	95980	115040	82830	81580	63010	92050	75380	83650	128710	128610	141520	145250
MEAN	3096	3835	2672	2632	2250	2969	2513	2698	4290	4149	4565	4842
MAX	6780	7070	4970	4410	2570	4710	3460	4560	12800	8070	9420	10500
MIN	2060	1970	1860	1890	1890	1790	1830	1890	2630	3060	3610	2110

CAL YR 1988 TOTAL 1239050 MEAN 3385 MAX 7110 MIN 1860
WTR YR 1989 TOTAL 1233610 MEAN 3380 MAX 12800 MIN 1790

e Estimated

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-77, 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC- ITY, MEAN (F/S) (00055)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
12...	1545	81700	17002	3	165	E0.50	3970	643	7.70	9.5	16.5
12...	1546	81700	80020	3	165	E0.50	3970	618	7.68	9.5	--
NOV											
08...	1630	81700	17002	3	165	E0.0	E2690	653	7.10	7.0	12.0
08...	1631	81700	80020	3	165	E0.0	E2690	647	7.77	7.0	--
DEC											
07...	1445	81700	17002	3	165	E0.50	1570	788	8.70	8.0	8.5
07...	1446	81700	80020	3	165	E0.50	1570	782	7.69	8.0	--
JAN											
12...	0900	81700	17002	3	170	E0.50	3200	868	8.20	1.5	4.5
12...	0901	81700	80020	3	170	E0.50	3200	867	7.72	1.5	--
FEB											
08...	0830	81700	17002	3	157	E1.00	2200	1230	7.00	-4.0	4.5
08...	0831	61700	80020	3	157	E1.00	2200	1220	7.65	-4.0	--
MAR											
09...	0845	81700	17002	3	165	E0.50	3270	1310	6.70	7.5	6.0
09...	0846	81700	80020	3	165	E0.50	3270	1310	7.27	7.5	--
APR											
06...	0815	81700	17002	3	162	E1.00	4520	1040	7.50	13.5	10.0
06...	0816	81700	80020	3	162	E1.00	4520	917	7.82	13.5	--
MAY											
12...	0815	81700	17002	3	165	E0.50	1800	906	6.80	18.0	14.5
12...	0816	81700	80020	3	165	E0.50	1800	941	7.38	18.0	--
JUN											
07...	0815	81700	17002	3	165	E0.50	2930	783	6.70	--	19.5
07...	0816	81700	80020	3	165	E0.50	2930	751	7.24	--	--
JUL											
12...	0915	81700	17002	3	165	E0.50	2990	678	6.90	25.5	27.0
12...	0916	81700	80020	3	165	E0.50	2990	649	7.31	25.5	--
12...	0930	81700	17002	3	165	E0.50	2990	678	6.90	27.0	25.5
12...	0931	81700	80020	3	165	E0.50	2990	639	7.51	25.5	--
AUG											
09...	1525	81700	17002	3	165	E0.50	4120	638	7.10	27.0	23.5
09...	1526	81700	80020	3	165	E0.50	4120	632	7.43	27.0	--
31...	1615	81700	17002	3	157	E1.00	6110	663	7.10	26.5	24.5
31...	1616	81700	80020	3	157	E1.00	6110	669	7.25	26.5	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)
OCT											
12...	3.0	5.3	22	--	--	200	61	18	50	50	18
12...	--	--	--	8300	--	--	--	18	--	--	--
NOV											
08...	4.9	4.3	26	--	--	190	88	12	49	49	17
08...	--	--	--	8700	--	--	--	12	--	--	--
DEC											
07...	2.1	6.0	14	--	--	250	85	20	62	62	22
07...	--	--	--	K330	K200	250	250	20	--	62	--
JAN											
12...	6.7	8.4	20	--	--	220	82	20	57	55	21
12...	--	--	--	--	--	--	--	20	--	--	--
FEB											
08...	1.5	7.5	25	--	--	230	82	1.0	59	59	21
08...	--	--	--	1400	1056	--	--	1.0	--	--	--
MAR											
09...	2.1	7.2	27	--	--	260	100	5.0	67	67	23
09...	--	--	--	1000	1667	250	260	5.0	--	64	--
APR											
06...	2.3	4.8	24	--	--	280	110	12	69	70	25
06...	--	--	--	560	662	--	--	12	--	--	--
MAY											
12...	2.5	4.8	32	60	--	230	76	27	58	59	21
12...	--	--	--	--	1467	--	--	27	--	--	--
JUN											
07...	9.0	1.8	24	--	--	220	77	24	57	56	21
07...	--	--	--	1000	1600	--	--	24	--	--	--
JUL											
12...	1.0	2.9	21	--	--	190	53	16	50	49	16
12...	--	--	--	2200	1333	--	--	16	--	--	--
12...	1.5	2.9	21	--	--	190	51	17	49	50	16
12...	--	--	--	1800	892	--	--	17	--	--	--
AUG											
09...	2.4	3.4	15	--	--	180	46	14	47	47	17
09...	--	--	--	1800	2500	--	--	14	--	--	--
31...	4.9	2.6	19	--	--	190	51	15	51	48	17
31...	--	--	--	3100	1700	--	--	15	--	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
12...	17	57	57	5.2	5.1	--	--	--	--	134	71
12...	--	--	--	--	--	0	161	130	132	--	--
NOV											
08...	17	61	62	5.2	5.1	--	--	--	--	105	--
08...	--	--	--	--	--	0	128	100	105	--	--
DEC											
07...	22	68	69	5.7	5.7	--	--	--	--	161	--
07...	23	--	68	--	5.6	0	198	160	162	--	--
JAN											
12...	20	88	84	4.6	4.3	--	--	--	--	138	--
12...	--	--	--	--	--	0	166	140	136	--	--
FEB											
08...	21	150	150	6.8	6.7	--	--	--	--	152	--
08...	--	--	--	--	--	0	184	150	151	--	--
MAR											
09...	23	180	--	7.2	7.3	--	--	--	--	160	--
09...	23	--	160	--	6.0	0	195	160	160	--	--
APR											
06...	25	100	100	6.2	5.9	--	--	--	--	165	--
06...	--	--	--	--	--	0	205	170	168	--	--
MAY											
12...	21	83	85	8.1	8.4	--	--	--	--	158	110
12...	--	--	--	--	--	0	194	160	159	--	--
JUN											
07...	20	58	58	4.3	4.2	--	--	--	--	146	74
07...	--	--	--	--	--	0	178	150	146	--	--
JUL											
12...	16	57	56	4.3	5.5	--	--	--	--	136	72
12...	--	--	--	--	--	0	166	140	136	--	--
12...	16	56	57	4.3	4.3	--	--	--	--	--	70
12...	--	--	--	--	--	0	170	140	139	--	--
AUG											
09...	16	49	49	5.9	--	--	--	--	--	138	56
09...	--	--	--	--	--	0	167	140	137	--	--
31...	16	59	59	4.8	4.5	--	--	--	--	135	71
31...	--	--	--	--	--	0	164	130	134	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
12...	71	57	0.9	0.84	--	--	380	367	9	3	--
12...	--	--	--	--	--	--	--	--	--	--	0.080
NOV											
08...	81	68	0.7	--	--	--	389	365	21	7	--
08...	--	--	--	--	--	0.18	--	--	--	--	0.140
DEC											
07...	97	90	0.8	--	--	--	467	466	16	4	--
07...	--	--	--	0.30	5.4	--	--	--	--	--	0.300
JAN											
12...	88	120	0.7	--	--	--	--	475	20	6	--
12...	--	--	--	--	--	--	--	--	--	--	1.40
FEB											
08...	100	220	0.8	--	--	--	696	675	8	2	--
08...	--	--	--	--	--	0.12	--	--	--	--	0.240
MAR											
09...	100	250	0.7	--	--	--	699	--	17	4	--
09...	--	--	--	0.80	4.7	--	--	--	--	--	0.140
APR											
06...	120	150	0.7	--	--	--	572	597	11	4	--
06...	--	--	--	--	--	--	--	--	--	--	0.160
MAY											
12...	110	110	0.9	0.84	--	--	573	492	9	4	--
12...	--	--	--	--	--	0.25	--	--	--	--	0.300
JUN											
07...	78	85	0.5	0.46	--	--	463	403	20	5	--
07...	--	--	--	--	--	--	--	--	--	--	0.120
JUL											
12...	72	71	0.8	0.77	--	--	386	368	8	3	--
12...	--	--	--	--	--	--	--	--	--	--	0.330
12...	72	69	0.7	0.71	--	--	378	368	6	2	--
12...	--	--	--	--	--	--	--	--	--	--	0.330
AUG											
09...	56	69	0.4	0.43	--	--	369	336	8	3	--
09...	--	--	--	--	--	0.060	--	--	--	--	0.150
31...	72	72	0.7	0.79	--	--	383	369	34	6	--
31...	--	--	--	--	--	--	--	--	--	--	0.170

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
12...	6.40	6.20	0.430	0.440	0.004	--	1.4	--	1.40	1.30	--
12...	--	6.00	--	0.430	--	0.77	1.2	1.2	1.40	1.30	1.40
NOV											
08...	4.20	4.20	0.650	0.740	0.003	--	1.9	--	0.780	0.630	--
08...	--	4.00	--	0.570	--	0.73	1.8	1.3	0.730	0.610	0.500
DEC											
07...	5.20	5.10	1.20	1.00	0.095	--	2.0	--	1.60	1.30	--
07...	--	5.50	--	0.950	--	0.95	2.5	1.9	0.830	0.700	0.590
JAN											
12...	3.70	3.60	1.00	1.00	0.013	--	2.0	--	0.490	0.360	--
12...	--	3.80	--	1.00	--	0.50	2.3	1.5	0.390	0.360	0.260
FEB											
08...	6.30	6.40	1.20	1.20	0.002	--	2.4	--	1.05	0.960	--
08...	--	5.30	--	1.20	--	1.2	2.4	2.4	1.00	0.920	0.790
MAR											
09...	3.30	3.30	4.70	4.50	0.003	--	5.9	--	0.600	0.500	--
09...	--	3.20	--	4.90	--	0.0	6.2	4.8	0.640	0.500	0.430
APR											
06...	5.00	5.00	2.70	2.60	0.017	--	3.8	--	0.740	0.620	--
06...	--	4.90	--	2.40	--	0.80	3.2	3.2	0.800	0.660	0.600
MAY											
12...	6.20	--	2.20	--	0.004	--	2.6	--	1.10	1.00	--
12...	--	6.00	--	1.60	--	3.5	3.3	5.1	1.10	0.930	0.860
JUN											
07...	2.50	2.50	1.00	0.960	0.002	--	1.9	--	0.314	0.220	--
07...	--	2.70	--	0.850	--	0.75	1.7	1.6	0.280	0.230	0.210
JUL											
12...	2.90	2.90	2.20	2.00	0.012	--	2.6	--	0.450	0.390	--
12...	--	3.00	--	1.70	--	0.0	2.6	1.0	0.430	0.380	0.320
12...	2.90	2.90	1.80	1.80	--	--	2.3	--	0.440	0.390	--
12...	--	3.00	--	1.70	--	1.2	2.6	2.9	0.410	0.380	0.330
AUG											
09...	3.10	3.10	0.820	0.960	0.006	--	1.4	--	0.430	0.380	--
09...	--	3.30	--	0.670	--	0.73	1.7	1.4	0.440	0.420	0.340
31...	3.40	2.90	1.70	1.60	0.013	--	2.1	--	0.620	0.430	--
31...	--	2.90	--	1.40	--	0.90	2.6	2.3	0.570	0.380	0.360

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT											
12...	140	<50	--	2	2	10	12	<0.5	<0.5	170	170
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	380	<50	--	2	1	20	12	<0.5	<0.5	170	170
08...	--	--	1	--	--	--	--	--	--	--	--
DEC											
07...	280	<50	--	2	2	20	17	<0.5	<0.5	190	--
07...	250	200	--	--	--	100	24	<10	<0.5	170	180
JAN											
12...	430	50	--	1	1	20	20	<0.5	<0.5	170	160
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	140	<50	--	1	1	<5	<5	<0.5	<0.5	210	210
08...	--	--	3	--	--	--	--	--	--	--	--
MAR											
09...	360	120	--	2	1	20	19	<0.5	<0.5	180	180
09...	340	<10	--	--	--	100	21	<10	<0.5	190	180
APR											
06...	330	120	--	1	1	30	22	<0.5	<0.5	190	200
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	220	160	--	2	2	20	17	<0.5	<0.5	220	--
12...	--	--	3	--	--	--	--	--	--	--	--
JUN											
07...	1500	1000	--	1	1	40	35	<0.5	<1	160	160
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	150	70	--	1	2	20	17	<0.5	<0.5	120	120
12...	--	--	--	--	--	--	--	--	--	--	--
12...	150	<50	--	1	1	20	17	<0.5	<0.5	120	120
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	200	80	--	2	2	20	21	<0.5	<0.5	120	120
09...	--	--	2	--	--	--	--	--	--	--	--
31...	560	60	--	1	1	30	15	<0.5	<0.5	160	150
31...	--	--	--	--	--	--	--	--	--	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
OCT											
12...	.46	.23	7	<5	<5	<5	<5	<5	330	290	5
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	.61	.15	8	<5	<5	<5	<5	<5	780	100	8
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	.6	.1	8	<5	<5	<5	6	<5	530	77	7
07...	<1	<1	6	5	--	<3	10	<10	560	410	<5
JAN											
12...	.4	.2	13	10	<5	<5	<5	<5	660	<50	5
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	.6	.3	13	10	<5	<5	<5	<5	260	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
MAR											
09...	.6	.1	17	8	<5	<5	9	<5	480	<50	<5
09...	1	<1	11	<5	--	<3	10	<10	570	31	<5
APR											
06...	.6	.1	11	7	<5	<5	<5	<5	380	<50	<5
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	.3	.2	14	10	6	5	7	6	260	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	.2	<.1	6	<5	<5	<5	6	<5	900	<50	<5
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	.2	<.1	<5	<5	<5	<5	<5	<5	200	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
12...	.3	<.1	17	<5	<5	<5	<5	<5	190	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	.3	.1	12	9	<5	<5	<5	<5	230	<50	<5
09...	--	--	--	--	--	--	--	--	--	--	--
31...	1.2	.1	6	<5	<5	<5	7	<5	880	<50	14
31...	--	--	--	--	--	--	--	--	--	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT											
12...	<5	25	21	--	--	--	23	22	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	<5	48	41	<0.05	<0.05	--	14	11	<1	<3	<3.0
08...	--	--	--	--	--	5	--	--	--	--	--
DEC											
07...	<5	41	35	--	--	--	36	33	<1	<3	<3.0
07...	10	40	40	<0.10	<0.1	<10	46	40	--	<1	<1.0
JAN											
12...	<5	46	38	--	--	--	24	16	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	<5	37	34	--	--	--	16	--	<1	<3	<3.0
08...	--	--	--	--	--	8	--	--	--	--	--
MAR											
09...	<5	59	55	--	--	--	24	18	1	<5	<3.0
09...	<10	100	48	--	--	<10	22	30	--	<1	<1.0
APR											
06...	<5	61	53	<0.05	<0.05	--	30	28	<1	<3	<3.0
06...	--	--	--	<0.10	<0.1	--	--	--	--	--	--
MAY											
12...	<5	42	37	<0.05	<0.05	--	30	29	<1	5	<5.0
12...	--	--	--	--	--	6	--	--	--	--	--
JUN											
07...	<5	53	44	--	--	--	10	10	<1	<3	<3.0
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	<5	27	22	<0.05	<0.05	--	10	--	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<5	27	22	<0.05	<0.05	--	12	11	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	<5	25	21	--	--	--	19	19	<1	<5	<5.0
09...	--	--	--	--	--	6	--	--	--	--	--
31...	<5	56	45	--	--	--	9	<5	<1	<3	<3.0
31...	--	--	--	--	--	--	--	--	--	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
12...	190	190	<5	<5	<100	<100	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	190	190	<5	<5	120	120	--	--	--	--	--
08...	--	--	--	--	--	--	0.4	0.7	8.1	1.1	6.1
DEC											
07...	240	240	<5	<5	<100	<100	--	--	--	--	--
07...	--	240	--	<6	60	64	--	--	--	--	--
JAN											
12...	240	230	<5	<5	<100	<100	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	270	260	<5	<5	<100	<100	--	--	--	--	--
08...	--	--	--	--	--	--	2.2	<0.4	15	<0.4	9.5
MAR											
09...	270	--	6	<5	<100	<100	--	--	--	--	--
09...	--	270	--	<6	60	63	--	--	--	--	--
APR											
06...	280	280	<5	<5	<100	<100	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	240	--	7	7	<100	<100	--	--	--	--	--
12...	--	--	--	--	--	--	1.1	1.7	7.5	1.0	6.5
JUN											
07...	200	200	<5	<5	<100	<100	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	210	200	<5	<5	<50	<50	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	200	210	<5	<5	<100	<50	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	200	200	<5	6	<50	<50	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
31...	200	200	<5	<5	230	13	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
12...	--	6.1	--	--	<0.00	<0.005	<5	1	--	--	--
12...	--	--	4.7	0.6	--	--	--	--	10	107	100
NOV											
08...	--	8.8	--	--	0.02	0.020	<5	1	--	--	--
08...	1.1	--	5.2	0.4	--	--	--	--	15	0.0	100
DEC											
07...	--	7.4	--	--	<0.00	<0.005	<5	1	--	--	--
07...	--	7.1	4.8	0.7	<0.01	<0.010	--	--	15	64	100
JAN											
12...	--	7.9	--	--	<0.00	<0.005	<5	1	--	--	--
12...	--	--	6.1	0.8	--	--	--	--	19	164	100
FEB											
08...	--	9.6	--	--	<0.00	<0.005	<5	1	--	--	--
08...	<0.4	--	6.5	0.6	--	--	--	--	19	113	91
MAR											
09...	--	9.6	--	--	0.00	0.005	<5	<1	--	--	--
09...	--	10	7.5	0.6	<0.01	<0.010	--	--	15	132	98
APR											
06...	--	8.7	--	--	<0.00	<0.005	<5	1	--	--	--
06...	--	--	6.6	0.6	--	--	--	--	11	134	89
MAY											
12...	--	9.4	--	--	<0.00	<0.005	<5	2	--	--	--
12...	0.8	--	7.6	0.7	--	--	--	--	7	34	97
JUN											
07...	--	9.0	--	--	<0.00	0.005	<5	2	--	--	--
07...	--	--	6.1	0.7	--	--	--	--	23	182	99
JUL											
12...	--	6.8	--	--	<0.00	0.005	5	<1	--	--	--
12...	--	--	4.9	0.5	--	--	--	--	7	57	95
12...	--	9.3	--	--	<0.00	0.005	<5	<1	--	--	--
12...	--	--	4.8	0.5	--	--	--	--	6	48	100
AUG											
09...	--	6.0	--	--	<0.00	<0.005	<5	<1	--	--	--
09...	--	--	4.9	0.4	--	--	--	--	8	89	100
31...	--	5.5	--	--	<0.00	<0.005	<5	2	--	--	--
31...	--	--	4.9	--	--	--	--	--	30	495	98

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT											
12...	1530	81700	81700	1.00	1	165	45.0	650	8.40	16.5	5.4
12...	1531	81700	81700	10.0	1	165	45.0	648	7.60	16.5	5.3
12...	1532	81700	81700	20.0	1	165	45.0	649	7.70	16.5	5.3
12...	1540	81700	81700	1.00	1	165	85.0	644	7.50	16.5	5.4
12...	1541	81700	81700	10.0	1	165	85.0	643	7.70	16.5	5.3
12...	1542	81700	81700	20.0	1	165	85.0	643	7.60	16.5	5.3
12...	1548	81700	81700	1.00	1	165	125	639	7.60	16.5	5.3
12...	1549	81700	81700	10.0	1	165	125	639	7.40	16.5	5.3
12...	1550	81700	81700	20.0	1	165	125	639	7.40	16.5	5.2
NOV											
08...	1625	81700	81700	1.00	1	165	45.0	653	7.50	12.0	4.4
08...	1626	81700	81700	10.0	1	165	45.0	654	7.30	12.0	4.2
08...	1627	81700	81700	20.0	1	165	45.0	653	7.20	12.0	4.2
08...	1628	81700	81700	1.00	1	165	85.0	652	7.20	12.0	4.7
08...	1629	81700	81700	10.0	1	165	85.0	653	7.10	12.0	4.3
08...	1632	81700	81700	20.0	1	165	85.0	653	7.10	12.0	4.2
08...	1633	81700	81700	1.00	1	165	125	657	--	12.0	4.4
08...	1634	81700	81700	10.0	1	165	125	659	--	12.0	4.4
08...	1635	81700	81700	20.0	1	165	125	659	--	12.0	4.7
DEC											
07...	1425	81700	81700	1.00	1	165	45.0	784	8.20	8.5	5.9
07...	1426	81700	81700	10.0	1	165	45.0	785	8.70	8.5	5.9
07...	1427	81700	81700	20.0	1	165	45.0	794	8.30	8.5	5.7
07...	1428	81700	81700	1.00	1	165	85.0	788	8.70	8.5	6.0
07...	1429	81700	81700	10.0	1	165	85.0	790	8.40	8.5	5.8
07...	1430	81700	81700	20.0	1	165	85.0	787	8.30	8.5	5.8
07...	1431	81700	81700	1.00	1	165	125	788	8.20	8.5	6.1
07...	1432	81700	81700	10.0	1	165	125	788	8.10	8.5	5.9
07...	1433	81700	81700	20.0	1	165	125	788	7.90	8.5	5.7
JAN											
12...	0830	81700	81700	2.00	1	170	50.0	864	9.30	4.5	9.9
12...	0831	81700	81700	15.0	1	170	50.0	865	8.40	4.5	9.6
12...	0835	81700	81700	2.00	1	170	90.0	868	8.20	4.5	8.4
12...	0837	81700	81700	15.0	1	170	90.0	869	8.00	4.5	8.4
12...	0840	81700	81700	2.00	1	170	130	864	7.50	4.5	8.3
12...	0845	81700	81700	15.0	1	170	130	866	7.80	4.5	8.2
FEB											
08...	0825	81700	81700	1.00	1	157	45.0	1220	7.50	5.0	7.9
08...	0826	81700	81700	5.00	1	157	45.0	1230	7.40	4.5	7.8
08...	0827	81700	81700	15.0	1	157	45.0	1230	7.20	4.5	7.6
08...	0828	81700	81700	25.0	1	157	45.0	1230	7.20	4.5	7.7
08...	0829	81700	81700	1.00	1	157	85.0	1230	7.00	4.5	7.6
08...	0832	81700	81700	5.00	1	157	85.0	1230	7.00	4.5	7.5
08...	0833	81700	81700	15.0	1	157	85.0	1240	7.00	4.5	8.5
08...	0834	81700	81700	25.0	1	157	85.0	1240	7.00	4.5	7.5
08...	0835	81700	81700	1.00	1	157	125	1240	6.80	4.5	7.6
08...	0836	81700	81700	5.00	1	157	125	1250	6.80	4.5	7.6
08...	0837	81700	81700	15.0	1	157	125	1250	6.90	4.5	7.4
08...	0838	81700	81700	20.0	1	157	125	1240	6.80	4.0	7.3
MAR											
09...	0833	81700	81700	5.00	1	165	45.0	1290	6.60	6.5	7.6
09...	0834	81700	81700	20.0	1	165	45.0	1300	6.70	6.0	7.4
09...	0835	81700	81700	5.00	1	165	85.0	1260	6.70	6.0	7.3
09...	0836	81700	81700	20.0	1	165	85.0	1310	6.70	6.0	7.2
09...	0837	81700	81700	5.00	1	165	125	1300	6.70	6.0	7.7
09...	0838	81700	81700	20.0	1	165	125	1300	6.70	6.0	7.7
APR											
06...	0805	81700	81700	1.00	1	162	45.0	1020	7.60	10.0	4.8
06...	0806	81700	81700	10.0	1	162	45.0	1020	7.50	10.0	5.1
06...	0807	81700	81700	20.0	1	162	45.0	1030	7.50	10.0	4.8
06...	0808	81700	81700	1.00	1	162	85.0	1050	7.40	10.0	4.8
06...	0809	81700	81700	10.0	1	162	85.0	1030	7.50	10.0	4.8
06...	0810	81700	81700	20.0	1	162	85.0	1040	7.50	10.0	4.8
06...	0811	81700	81700	1.00	1	162	125	1040	7.50	10.0	4.8
06...	0812	81700	81700	10.0	1	162	125	1050	7.50	10.0	4.8
06...	0813	81700	81700	20.0	1	162	125	1050	7.50	10.0	4.7

05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
MAY											
12...	0817	81700	81700	5.00	1	165	45.0	907	6.70	14.5	4.7
12...	0818	81700	81700	20.0	1	165	45.0	907	6.80	14.5	4.6
12...	0819	81700	81700	5.00	1	165	85.0	906	6.80	14.5	4.8
12...	0820	81700	81700	20.0	1	165	85.0	905	6.80	14.5	4.6
12...	0821	81700	81700	5.00	1	165	125	897	6.90	14.5	5.0
12...	0822	81700	81700	20.0	1	165	125	902	6.90	14.5	4.8
JUN											
07...	0800	81700	81700	1.00	1	165	45.0	780	6.70	19.5	1.7
07...	0801	81700	81700	10.0	1	165	45.0	764	6.60	19.5	1.7
07...	0802	81700	81700	20.0	1	165	45.0	792	6.60	19.5	1.6
07...	0803	81700	81700	1.00	1	165	85.0	783	6.70	19.5	1.8
07...	0804	81700	81700	10.0	1	165	85.0	814	6.80	19.5	1.7
07...	0805	81700	81700	20.0	1	165	85.0	774	6.70	20.0	1.7
07...	0806	81700	81700	1.00	1	165	145	752	6.90	20.5	1.7
07...	0807	81700	81700	10.0	1	165	145	789	6.80	20.5	1.7
07...	0808	81700	81700	20.0	1	165	145	824	6.80	20.0	1.6
JUL											
12...	0900	81700	81700	1.00	1	165	45.0	688	6.50	27.0	3.0
12...	0903	81700	81700	10.0	1	165	45.0	688	6.80	27.0	2.9
12...	0904	81700	81700	20.0	1	165	45.0	684	6.80	27.0	2.8
12...	0905	81700	81700	20.0	1	165	85.0	670	6.90	27.0	2.8
12...	0906	81700	81700	10.0	1	165	85.0	679	6.90	27.0	2.9
12...	0907	81700	81700	1.00	1	165	85.0	678	6.90	27.0	2.9
12...	0910	81700	81700	1.00	1	165	125	675	6.90	27.0	3.0
12...	0911	81700	81700	10.0	1	165	125	675	6.90	27.0	2.9
12...	0912	81700	81700	20.0	1	165	125	631	6.90	27.0	2.8
AUG											
09...	1455	81700	81700	1.00	1	165	45.0	639	7.10	23.5	3.4
09...	1456	81700	81700	10.0	1	165	45.0	637	7.10	23.5	3.4
09...	1457	81700	81700	20.0	1	165	45.0	637	7.10	23.5	3.4
09...	1458	81700	81700	1.00	1	165	85.0	640	7.00	23.5	3.4
09...	1459	81700	81700	10.0	1	165	85.0	638	7.10	23.5	3.4
09...	1500	81700	81700	20.0	1	165	85.0	637	7.00	23.5	3.4
09...	1501	81700	81700	1.00	1	165	125	642	7.10	23.5	3.5
09...	1502	81700	81700	10.0	1	165	125	641	7.00	23.5	3.4
09...	1503	81700	81700	20.0	1	165	125	639	7.00	23.5	3.4
31...	1546	81700	81700	1.00	1	157	45.0	662	7.00	24.5	2.5
31...	1547	81700	81700	10.0	1	157	45.0	661	7.00	24.5	2.4
31...	1548	81700	81700	20.0	1	157	45.0	660	7.00	24.5	2.7
31...	1549	81700	81700	1.00	1	157	85.0	663	7.10	24.5	2.5
31...	1550	81700	81700	10.0	1	157	85.0	664	7.00	24.5	2.5
31...	1551	81700	81700	20.0	1	157	85.0	663	7.00	24.5	2.5
31...	1552	81700	81700	1.00	1	157	125	663	7.10	24.5	2.6
31...	1553	81700	81700	10.0	1	157	125	662	7.00	24.5	2.5
31...	1554	81700	81700	20.0	1	157	125	662	7.00	24.5	2.5

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL

LOCATION.--Lat 41°34'11", long 88°04'42", in SW1/4 sec.27, T.36 N., R.10 E., Will County, Hydrologic Unit 07120004, on upper end of 9-foot navigation channel at Lockport Lock and Power Plant on Chicago Sanitary and Ship Canal, 1.1 mi upstream from Des Plaines River, and 1.7 mi southwest of Lockport.

DRAINAGE AREA.--740 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in the Water-Resources Investigations 78-22 and 79-23 as site GI 02.

REMARKS.--Discharge values were obtained from Chicago Sanitary and Ship Canal at Romeoville (station 05536995).

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
25...	1130	17002	17002	3490	692	8.10	14.0	0.77	4.8	15	K4900
NOV											
29...	1000	17002	17002	2240	789	--	11.0	8.1	5.5	23	840
JAN											
23...	1245	17002	17002	1870	921	7.70	6.5	3.1	7.0	24	310
MAR											
10...	1045	17002	17002	2690	1290	7.80	5.5	11	5.9	24	K690
APR											
12...	1030	17002	17002	3310	953	7.80	10.0	6.2	6.0	20	340
MAY											
30...	1115	17002	17002	3240	816	8.30	20.0	2.0	4.3	24	400
JUN											
27...	0930	17002	17002	2530	762	7.30	25.5	2.5	4.7	18	240

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT											
25...	200	55	50	50	17	17	58	58	5.2	5.2	140
NOV											
29...	230	77	59	57	22	21	61	61	4.4	4.3	152
JAN											
23...	240	69	59	60	21	21	83	84	5.9	5.9	168
MAR											
10...	250	--	65	--	22	--	170	--	6.9	7.6	160
APR											
12...	270	110	68	67	25	25	100	100	5.1	5.4	164
MAY											
30...	210	69	59	54	20	18	79	72	4.4	4.8	140
JUN											
27...	210	62	54	54	19	19	69	69	5.8	5.9	152

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 25...	70	73	0.9	358	6	6	4.30	1.70	0.055	1.2	2.9
NOV 29...	86	86	0.7	407	15	6	4.70	1.10	--	1.1	2.2
JAN 23...	110	120	1.1	506	10	4	5.10	3.80	0.028	1.4	5.2
MAR 10...	93	250	0.9	--	10	4	3.50	3.80	0.033	2.7	6.5
APR 12...	110	130	1.0	537	14	5	5.70	1.60	0.019	1.2	2.8
MAY 30...	83	95	0.8	412	16	7	3.80	1.40	0.108	1.3	2.7
JUN 27...	89	89	1.0	418	8	6	2.60	1.70	0.021	1.1	2.8

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT 25...	7.2	0.500	0.470	230	70	2	6	<5	<0.5	<0.5
NOV 29...	6.9	0.520	0.410	320	<50	2	20	14	<0.5	<0.5
JAN 23...	10	0.840	0.730	190	<50	1	20	14	<0.5	<0.5
MAR 10...	10	0.610	0.440	270	60	1	<5	<5	<0.5	<0.5
APR 12...	8.5	0.620	0.580	590	480	2	20	20	<0.5	<0.5
MAY 30...	6.5	0.560	0.470	600	310	1	30	19	<0.5	<0.5
JUN 27...	5.4	0.550	0.470	220	90	1	20	18	<0.5	<0.5

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 25...	240	230	<3	<3	<5	<5	<5	<5	<5	<5
NOV 29...	190	190	<3	<3	8	<5	<5	<5	6	8
JAN 23...	220	--	<3	<3	9	8	<5	<5	<5	<5
MAR 10...	210	--	<3	<3	12	<5	<5	<10	<5	<5
APR 12...	230	230	<3	<3	7	5	<5	<5	<5	<5
MAY 30...	200	190	<3	<3	<5	<5	<5	<5	<5	<5
JUN 27...	200	200	<3	--	15	<5	<5	<5	<5	<5

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT 25...	270	<50	<5	<5	33	30	<0.05	18	--	<3
NOV 29...	470	<50	8	<5	48	37	<0.05	21	20	<3
JAN 23...	380	<50	<5	<5	52	48	<0.05	32	29	<3
MAR 10...	430	<50	<5	<5	53	51	<0.05	20	13	<3
APR 12...	270	<50	<5	<5	46	43	<0.05	19	--	<3
MAY 30...	530	83	5	<5	25	20	<0.05	13	--	<3
JUN 27...	310	<50	<5	<5	51	45	<0.05	22	16	<3

DATE	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 25...	<3.0	200	200	<5	<5	<100	<100	<0.005	5	3
NOV 29...	<3.0	220	210	<5	<5	<50	<50	0.006	7	<1
JAN 23...	<3.0	240	--	<5	<5	<100	<100	0.010	5	1
MAR 10...	<3.0	250	--	<5	<5	<100	<100	<0.005	8	1
APR 12...	<3.0	270	270	<5	<5	<100	<100	<0.005	9	1
MAY 30...	<3.0	240	220	<5	<5	<50	<50	<0.005	8	<1
JUN 27...	<3.0	220	220	<5	5	<100	<100	<0.005	9	--

05537500 LONG RUN NEAR LEMONT, IL

LOCATION.--Lat 41°38'33", long 87°59'57", in SW1/4SE1/4 sec.32, T.37 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Street, 2 mi south of Lemont, and at mile 5.4.

DRAINAGE AREA.--20.9 mi^2.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 637.20 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 1.0 ft^3/s, and fair below, except for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 16.6 ft^3/s, 10.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,160 ft^3/s, Oct. 10, 1954, gage height, 9.91 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1915	*521	*6.43	No other peak greater than base discharge.			

Minimum discharge, 0.23 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	3.6	9.0	e11	14	4.3	11	4.1	306	1.6	4.4	79
2	3.5	3.3	7.6	e8.8	13	3.3	11	3.9	225	1.6	2.6	34
3	3.1	3.0	7.2	e7.8	8.4	3.4	16	3.5	148	1.6	2.1	12
4	1.2	19	6.3	e7.2	e7.0	45	19	3.3	96	1.5	2.2	6.1
5	.73	20	6.1	e7.1	e6.9	64	15	3.9	55	1.6	2.3	4.4
6	.63	7.7	5.9	e14	e6.8	31	13	3.4	39	1.5	2.2	29
7	.59	6.0	5.3	e35	e6.4	24	12	3.2	28	1.3	1.8	25
8	.53	5.1	4.4	e88	e6.1	19	11	2.9	20	1.2	1.6	11
9	.60	20	4.0	e55	e6.0	20	9.5	2.9	15	1.1	1.8	15
10	.74	151	e3.7	e24	e5.1	29	8.2	2.8	12	1.0	1.5	12
11	.80	50	e3.5	e19	e5.1	34	7.6	2.4	10	1.1	1.2	8.5
12	1.8	37	3.9	e23	e5.2	31	7.5	2.6	15	7.2	1.2	5.6
13	2.2	49	4.2	e15	e6.0	26	7.2	2.7	15	3.1	1.7	14
14	2.5	27	3.8	e11	e7.0	26	6.5	2.3	9.6	1.8	1.4	15
15	2.3	33	3.2	e9.7	e6.4	34	9.5	2.2	7.2	1.3	1.5	9.3
16	3.2	109	e3.1	e9.0	e5.8	23	9.2	2.3	6.5	1.1	1.6	6.3
17	9.7	45	e3.4	e8.0	e5.1	23	8.1	2.4	5.4	1.1	1.3	4.7
18	39	26	3.8	e7.9	e5.1	46	9.0	2.1	5.1	3.1	1.1	3.5
19	8.2	49	3.9	e8.0	e5.2	28	8.5	3.6	4.3	24	1.0	3.2
20	2.6	40	3.6	e7.8	e5.3	23	6.4	6.0	3.9	30	2.5	3.0
21	2.0	24	3.3	8.5	e6.1	20	5.2	3.0	3.4	17	2.0	2.8
22	2.2	18	6.7	7.9	5.8	16	5.3	2.5	3.2	8.9	4.6	2.6
23	4.0	14	42	7.8	5.5	14	5.1	2.3	3.4	5.0	3.9	2.5
24	6.1	11	23	8.3	4.7	13	4.8	1.9	3.7	3.6	8.3	2.4
25	3.2	10	15	8.9	4.9	12	4.0	25	2.7	2.8	5.1	2.4
26	2.2	18	19	19	4.6	11	3.7	12	2.5	2.4	2.5	2.4
27	1.6	22	39	16	5.2	10	3.6	5.5	2.8	2.3	1.7	2.3
28	1.5	16	50	13	4.5	18	6.1	3.7	2.7	1.9	2.8	1.9
29	1.3	12	39	15	---	23	6.4	4.3	2.0	1.6	2.9	1.8
30	1.3	11	26	17	---	17	4.8	4.7	1.7	15	1.8	1.8
31	2.0	---	15	15	---	13	---	3.3	---	8.6	1.4	---
TOTAL	111.65	859.7	373.9	512.7	177.2	704.0	254.2	130.7	1054.1	156.9	74.0	323.5
MEAN	3.60	28.7	12.1	16.5	6.33	22.7	8.47	4.22	35.1	5.06	2.39	10.8
MAX	39	151	50	88	14	64	19	25	306	30	8.3	79
MIN	.33	3.0	3.1	7.1	4.5	3.3	3.6	1.9	1.7	1.0	1.0	1.8
CFSM	.17	1.37	.58	.79	.30	1.09	.41	.20	1.68	.24	.11	.52
IN.	.20	1.53	.67	.91	.32	1.25	.45	.23	1.88	.28	.13	.58

CAL YR 1988 TOTAL 5134.50 MEAN 14.0 MAX 200 MIN .11 CFSM .67 IN. 9.14
WTR YR 1989 TOTAL 4732.55 MEAN 13.0 MAX 306 MIN .33 CFSM .62 IN. 8.42

e Estimated

05539000 HICKORY CREEK AT JOLIET, IL

LOCATION.--Lat 41°31'10", long 88°04'10", in SW1/4NE1/4 sec.15, T.35 N., R.10 E., Will County, Hydrologic Unit 07120004, on right bank at Third Avenue in Joliet, 0.2 mi downstream from Spring Creek, and at mile 1.9.

DRAINAGE AREA.--107 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR IL 82-2: 1981(M).

GAGE.--Water-stage recorder. Datum of gage is 526.00 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1946, nonrecording gage at same site at datum 1.00 ft higher. Oct. 9, 1946, to Sept. 30, 1974, at datum 1.00 ft higher.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--45 years, 85.2 ft^3/s, 10.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft^3/s, June 13, 1981, gage height, 14.90 ft; minimum, 0.5 ft^3/s, Aug. 9, 16, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1915	*4,160	*7.11	No other peak greater than base discharge.			

Minimum daily discharge, 5.6 ft^3/s, Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.1	48	e60	89	e22	69	23	2260	17	19	413
2	21	5.8	41	e46	73	e21	61	22	1590	16	23	153
3	23	5.6	37	e36	61	e33	103	21	927	15	32	81
4	18	29	35	e35	e48	140	185	20	544	14	27	38
5	14	67	30	e40	e43	149	132	23	320	13	27	26
6	11	34	28	e90	e32	152	98	22	229	12	24	126
7	11	27	28	e240	e37	132	80	20	179	11	23	154
8	11	21	24	e400	e29	101	65	20	147	9.8	21	220
9	12	42	24	e210	e27	92	53	19	124	9.8	21	379
10	11	504	e20	e105	e26	122	46	18	104	9.2	26	188
11	9.8	246	e27	e74	e26	166	43	18	67	15	26	107
12	9.1	176	38	e90	e27	163	41	16	80	46	44	70
13	8.9	303	37	e80	e30	133	38	18	88	20	33	91
14	8.9	190	32	e60	e35	124	37	19	67	18	31	127
15	12	144	29	e56	e32	147	36	18	54	13	103	92
16	14	528	e25	e51	e28	115	35	20	48	12	64	64
17	42	337	e23	e49	e26	104	34	20	42	11	41	49
18	138	220	e30	52	e25	182	37	19	36	24	31	40
19	50	317	39	54	e26	168	38	33	34	217	26	34
20	25	318	27	56	e27	138	41	41	28	160	28	29
21	18	199	20	51	e30	124	35	30	25	115	28	25
22	10	140	30	49	e29	100	28	22	24	97	28	23
23	14	98	178	46	e26	86	26	18	23	88	28	19
24	18	81	136	44	e23	78	26	17	23	41	24	21
25	17	69	91	49	e24	72	24	214	21	28	22	18
26	14	75	63	91	e26	66	22	152	17	22	20	17
27	11	94	135	103	e25	61	21	84	34	19	20	16
28	8.7	84	e250	82	e25	127	33	54	37	18	19	14
29	8.2	65	e140	87	---	192	34	67	28	14	20	14
30	7.7	57	e110	109	---	129	27	78	21	22	19	15
31	7.1	---	e80	105	---	92	---	58	---	27	44	---
TOTAL	594.4	4482.5	1855	2700	955	3531	1548	1224	7221	1153.8	942	2663
MEAN	19.2	149	59.8	87.1	34.1	114	51.6	39.5	241	37.2	30.4	88.8
MAX	138	528	250	400	89	192	185	214	2260	217	103	413
MIN	7.1	5.6	20	35	23	21	21	16	17	9.2	19	14
CFSM	.18	1.40	.56	.81	.32	1.06	.48	.37	2.25	.35	.28	.83
IN.	.21	1.56	.64	.94	.33	1.23	.54	.43	2.51	.40	.33	.93

CAL YR 1988 TOTAL 22610.2 MEAN 61.8 MAX 768 MIN 1.8 CFSM .58 IN. 7.86
WTR YR 1989 TOTAL 28869.7 MEAN 79.1 MAX 2260 MIN 5.6 CFSM .74 IN. 10.04

e Estimated

05539000 HICKORY CREEK AT JOLIET, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1968-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GG 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
25...	1015	17002	17002	17	1220	8.70	5.5	6.3	11.1	18	K5900
NOV											
29...	0830	17002	17002	65	1020	7.20	3.0	22	11.4	21	2100
JAN											
23...	1100	17002	17002	46	1240	8.20	2.0	5.4	13.5	12	3600
MAR											
10...	0900	17002	17002	119	1100	7.70	2.0	16	12.2	18	K2900
APR											
12...	0900	17002	17002	40	1150	8.40	7.5	4.5	14.9	8	>4000
MAY											
30...	1200	17002	17002	86	1040	8.20	21.0	31	7.5	34	5000
JUN											
27...	1030	17002	17002	33	1420	7.70	24.5	9.1	8.5	21	30000

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT											
25...	360	360	87	83	38	37	120	120	7.3	7.0	130
NOV											
29...	390	390	90	90	41	41	72	71	3.5	3.4	140
JAN											
23...	440	440	100	100	46	46	90	90	3.9	3.9	180
MAR											
10...	400	400	97	93	44	41	99	--	4.4	--	140
APR											
12...	470	470	100	100	50	51	93	93	2.1	1.7	170
MAY											
30...	350	350	83	79	38	36	93	92	3.8	2.5	110
JUN											
27...	500	500	110	110	56	54	140	130	7.6	5.7	190

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05539000 HICKORY CREEK AT JOLIET, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 25...	190	567	17	2	2.10	0.770	0.049	0.560	0.440	830	170
NOV 29...	120	465	21	5	4.40	0.380	<0.001	0.250	0.140	580	<50
JAN 23...	170	597	12	5	4.00	0.550	0.009	0.310	0.220	170	60
MAR 10...	180	--	13	4	4.10	0.170	<0.001	0.290	0.130	520	510
APR 12...	140	570	10	4	3.30	0.060	0.002	0.180	0.120	930	750
MAY 30...	140	457	142	21	3.70	0.280	0.018	0.450	0.320	4900	350
JUN 27...	220	720	33	12	3.30	0.080	0.002	0.330	0.220	540	110

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT 25...	30	17	<0.5	<0.5	250	240	<3	<3	<5	<5	<5
NOV 29...	30	28	<0.5	<0.5	150	150	<3	<3	<5	<5	<5
JAN 23...	40	34	<0.5	<0.5	150	150	<3	<3	8	9	<5
MAR 10...	10	8	<0.5	<0.5	220	--	<3	<3	9	--	<5
APR 12...	40	42	<1.0	<0.5	150	150	<3	<3	<5	<5	<5
MAY 30...	70	46	<0.5	<0.5	170	160	<3	<3	<5	<5	<5
JUN 27...	60	56	<0.5	<0.5	270	--	<3	--	<5	<5	<5

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT											
25...	<5	<5	<5	1000	<50	24	<5	94	71	<5	<5
NOV											
29...	<5	<5	<5	990	<50	<5	<5	66	55	<5	<5
JAN											
23...	<5	<5	--	410	<50	<5	<5	66	63	6	<5
MAR											
10...	<5	<5	--	750	310	<5	29	57	--	<5	--
APR											
12...	<5	<5	<5	350	<50	<5	<5	45	39	<5	<5
MAY											
30...	<5	<5	<5	5700	<50	8	<5	140	38	<5	<5
JUN											
27...	<5	<5	<5	730	<50	<5	<5	82	25	<5	<5

DATE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT											
25...	<3	<3.0	340	330	<5	<5	<50	<50	<0.005	--	<1
NOV											
29...	<3	<3.0	260	260	<5	<5	<50	<50	<0.005	--	<1
JAN											
23...	<3	<3.0	310	310	<5	<5	<100	<100	<0.005	--	2
MAR											
10...	<3	<3.0	250	250	<5	<5	<100	<100	<0.005	--	1
APR											
12...	<3	<3.0	310	310	<5	<5	<50	<50	<0.005	--	<1
MAY											
30...	<3	<3.0	260	250	<5	<5	<50	<50	<0.005	--	<1
JUN											
27...	<3	<3.0	420	400	<5	6	<50	<50	<0.005	5	--

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL

LOCATION.--Lat 41°54'39", long 88°10'44", in SE1/4NW1/4 sec.35, T.40 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Highway 64, 2 mi northeast of West Chicago, and at mile 49.2.

DRAINAGE AREA.--28.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-77-1: 1966-67(M).

GAGE.--Water-stage recorder. Datum of gage is 717.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--28 years, 33.6 ft^3/s, 16.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 984 ft^3/s, Dec. 3, 1982, gage height, 10.44 ft; maximum gage height, 10.63 ft, Aug. 14, 1987; minimum discharge, 0.2 ft^3/s, July 1, 5, 8-12, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 5	0130	*549	*8.81	No other peak greater than base discharge.			

Minimum daily discharge, 11 ft^3/s, July 2, 8, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	28	28	39	e14	33	20	123	13	43	261
2	29	13	26	24	33	e14	32	19	86	11	37	213
3	20	13	24	24	29	e15	33	19	69	12	29	85
4	15	61	23	21	25	85	30	18	63	12	323	59
5	13	61	22	20	e30	67	28	21	41	12	492	44
6	14	36	21	27	e35	39	25	19	34	13	288	140
7	13	27	20	53	e30	35	25	18	28	12	122	105
8	14	23	18	109	e25	35	23	19	25	11	89	63
9	15	26	20	57	e22	42	17	18	24	12	86	104
10	14	86	18	37	e20	57	22	15	20	12	63	83
11	13	45	e16	34	e19	61	20	16	20	12	54	56
12	13	46	e15	45	e20	53	21	15	48	31	41	42
13	12	61	18	33	21	47	21	15	41	14	38	63
14	12	37	17	27	20	49	21	15	26	12	35	52
15	12	35	e14	25	18	65	21	15	21	12	37	43
16	13	171	e14	23	17	49	21	15	20	12	28	32
17	54	71	e13	22	17	47	22	14	18	11	24	30
18	96	48	e14	21	17	70	24	14	17	25	22	29
19	32	66	17	21	17	54	23	25	17	95	20	28
20	24	55	19	21	18	48	21	27	17	92	25	53
21	29	39	17	20	18	42	20	17	15	112	21	28
22	26	32	20	20	17	38	20	18	15	74	20	20
23	35	29	58	21	14	35	19	15	15	39	20	18
24	29	28	33	20	14	33	19	15	15	28	18	17
25	21	24	26	21	17	32	22	30	14	24	16	18
26	18	61	22	33	17	32	19	22	14	76	16	17
27	17	66	84	26	17	31	19	16	14	38	16	15
28	16	43	79	27	15	40	32	14	13	43	36	15
29	15	35	47	56	---	59	26	26	13	33	24	14
30	15	31	37	49	---	46	21	22	14	148	18	14
31	15	---	30	42	---	37	---	25	---	74	18	---
TOTAL	679	1382	830	1007	601	1371	700	577	900	1125	2119	1761
MEAN	21.9	46.1	26.8	32.5	21.5	44.2	23.3	18.6	30.0	36.3	68.4	58.7
MAX	96	171	84	109	39	85	33	30	123	148	492	261
MIN	12	13	13	20	14	14	17	14	13	11	16	14
CFSM	.77	1.62	.94	1.14	.75	1.55	.82	.65	1.05	1.27	2.40	2.06
IN.	.89	1.80	1.08	1.31	.78	1.79	.91	.75	1.17	1.47	2.77	2.30

CAL YR 1988 TOTAL 11883.4 MEAN 32.5 MAX 305 MIN 7.9 CFSM 1.14 IN. 15.51
WTR YR 1989 TOTAL 13052 MEAN 35.8 MAX 492 MIN 11 CFSM 1.25 IN. 17.04

e Estimated

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GBK 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT 07...	1300	17002	17002	14	692	8.10	11.5	15	8.4	27	K770	250
NOV 21...	1330	17002	17002	32	978	7.60	7.0	12	9.5	26	350	330
JAN 31...	1415	17002	17002	37	1150	7.50	8.0	3.3	11.9	22	K10	340
MAR 02...	1320	17002	17002	14	1300	9.20	1.0	15	11.6	28	K1000	380
APR 06...	1400	17002	17002	21	1250	8.20	13.0	3.7	12.9	30	K50	390
MAY 12...	1330	17002	17002	16	1230	8.00	14.5	5.7	8.7	33	270	320
JUN 14...	1330	17002	17002	25	1060	7.90	20.5	35	6.0	35	K1600	310
JUL 20...	1330	17002	17002	102	622	8.30	20.0	130	5.5	55	--	170

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 07...	250	64	61	25	23	110	110	10	9.8	76	150
NOV 21...	330	81	80	33	32	66	67	5.0	4.9	120	110
JAN 31...	340	85	83	34	33	100	100	5.4	5.3	140	190
MAR 02...	380	92	91	37	37	160	160	10	10	120	210
APR 06...	390	91	92	38	38	120	120	6.3	6.8	140	190
MAY 12...	320	77	76	32	31	130	130	9.8	9.7	110	180
JUN 14...	310	82	75	33	30	97	97	7.8	6.7	97	150
JUL 20...	170	53	42	23	16	53	52	6.4	4.9	55	82

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
OCT											
07...	432	55	9	16.0	0.170	0.005	2.77	2.69	1500	<50	60
NOV											
21...	415	19	8	6.40	0.580	0.004	0.790	0.680	460	<50	80
JAN											
31...	560	16	7	6.20	0.360	0.002	0.920	0.820	290	70	50
MAR											
02...	623	19	9	9.50	0.740	0.098	1.78	1.65	510	160	10
APR											
06...	590	5	3	7.50	0.550	0.021	1.27	1.13	540	320	50
MAY											
12...	541	41	10	13.0	0.300	0.008	2.16	2.02	1100	250	50
JUN											
14...	458	138	27	7.60	0.180	0.006	1.08	0.950	3100	390	90
JUL											
20...	252	253	40	3.20	0.180	0.014	0.630	0.400	4700	90	80

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT											
07...	49	<0.5	<0.5	580	570	<3	<3	<5	<5	<5	<5
NOV											
21...	69	<0.5	<0.5	180	180	<3	<3	<5	<5	<5	<5
JAN											
31...	48	<0.5	<0.5	170	160	<3	<3	7	<5	<5	<5
MAR											
02...	6	<0.5	<0.5	560	520	<3	<3	<5	<5	<5	<5
APR											
06...	48	<0.5	<0.5	340	--	<3	<3	<5	<5	<5	<5
MAY											
12. .	44	<2.0	<1	560	550	<3	<3	<5	<5	<5	<5
JUN											
14...	64	<0.5	<0.5	300	300	<3	<3	24	<5	<5	<5
JUL											
20...	40	<0.5	<0.5	110	100	<3	--	9	<5	5	<5

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT											
07...	8	<5	2100	<50	<5	<5	54	25	--	14	11
NOV											
21...	8	9	810	<50	<5	<5	50	39	--	17	14
JAN											
31...	7	<5	530	<50	<5	<5	57	49	--	6	7
MAR											
02...	<5	<5	760	<50	<5	<5	90	80	--	6	5
APR											
06...	6	5	530	<50	<5	<5	68	63	<0.05	6	5
MAY											
12...	<5	<5	1300	<50	<5	<5	89	72	--	10	--
JUN											
14...	11	<5	4400	<50	6	<5	110	38	--	28	15
JUL											
20...	14	5	7200	68	8	<5	160	28	--	19	10

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
07...	<3	<3.0	400	380	5	<5	<50	<50	0.006	--	<1
NOV											
21...	<3	<3.0	280	280	<5	<5	<100	<100	<0.005	--	<1
JAN											
31...	<3	<3.0	280	280	<5	<5	<50	<50	<0.005	--	<1
MAR											
02...	<3	<3.0	350	--	<5	<5	<50	<50	<0.005	--	<1
APR											
06...	<3	<3.0	310	--	<5	<5	<100	<100	<0.005	5	2
MAY											
12...	<3	<3.0	340	340	<5	<5	<50	<50	<0.005	--	2
JUN											
14...	<3	<3.0	290	290	<5	<5	<100	<100	<0.005	--	2
JUL											
20...	<3	<3.0	170	150	10	<5	<100	--	<0.005	--	--

05540060 KRESS CREEK AT WEST CHICAGO, IL

LOCATION.--Lat 41°51'23", long 88°12'15", in NW1/4NW1/4 sec.22, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on left downstream side of bridge at intersection of Wilson Street and Joliet Road, 0.5 mi south of West Chicago, and at mile 0.5.

DRAINAGE AREA.--18.1 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1961-80. November 1985 to current year.

REVISED RECORDS.--WDR IL-77-1: 1961-76(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929. October 1961 to September 1980, crest-stage gage at same site at datum 5.44 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 637 ft^3/s, July 18, 1964, gage height, 7.90 ft, present datum; minimum, 0.02 ft^3/s, Sept. 1, 2, 9, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1320	120	5.29	Sept. 2	0455	*180	*5.68

Minimum discharge, 0.18 ft^3/s, July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	2.8	8.6	9.8	15	3.2	11	3.3	48	1.5	13	3.0
2	5.6	3.5	e7.0	e8.5	12	2.4	9.1	3.0	28	.74	8.5	112
3	2.1	1.8	e6.1	e7.6	e8.8	4.5	9.8	2.5	22	.80	5.0	36
4	.97	24	e5.5	e7.4	e7.8	32	8.6	2.9	16	.89	3.5	24
5	.51	19	e4.9	e8.0	e7.0	26	8.1	3.4	12	.60	36	14
6	.36	9.1	e4.4	11	e6.6	17	8.0	5.1	9.1	.51	40	11
7	.35	5.6	e4.1	24	e6.4	11	7.4	3.0	8.3	.67	22	40
8	.45	6.1	e3.8	37	6.6	9.5	7.2	2.2	6.4	.63	17	37
9	.57	8.3	e3.7	25	6.1	12	6.4	2.8	5.3	.50	16	25
10	3.7	26	e3.8	14	8.3	20	5.2	2.9	4.9	.41	12	42
11	2.0	14	e4.0	13	5.4	23	5.8	3.0	4.2	.38	7.3	31
12	4.7	14	4.7	19	5.3	20	5.6	2.5	21	.56	4.6	23
13	2.1	18	6.5	12	5.0	19	5.0	4.8	14	2.1	5.7	19
14	4.5	12	5.6	10	5.8	19	5.8	4.1	7.9	1.1	4.0	25
15	4.0	14	7.9	11	5.0	20	5.1	3.9	5.3	.41	5.0	19
16	7.9	57	4.4	9.0	4.5	17	5.1	3.1	4.6	.29	8.1	14
17	41	28	5.2	10	4.6	16	4.9	2.4	4.7	.21	6.1	11
18	33	20	3.9	9.0	3.9	19	5.9	2.2	3.5	.26	3.3	7.8
19	18	24	e3.2	7.2	4.5	15	6.7	8.5	2.8	9.9	2.9	7.2
20	8.7	21	e4.1	5.8	4.0	13	4.8	8.7	1.9	33	2.5	6.9
21	11	14	7.2	5.4	4.9	13	5.2	4.3	1.9	19	4.9	6.7
22	7.4	12	8.2	5.0	3.5	11	4.6	3.2	1.9	11	3.3	5.1
23	11	11	14	7.3	4.4	10	3.8	3.7	2.1	11	2.3	6.0
24	6.7	9.0	9.1	5.5	3.3	10	3.5	3.8	2.1	5.4	4.6	5.5
25	3.9	8.3	7.0	6.7	4.0	10	3.5	13	1.9	1.9	1.5	2.6
26	2.6	18	6.3	8.3	2.7	10	4.1	6.4	2.4	3.0	2.1	3.1
27	2.4	19	30	6.8	3.1	10	3.7	2.5	2.1	2.3	1.9	3.2
28	2.2	15	30	7.0	2.4	15	8.8	2.1	2.5	2.6	1.7	4.8
29	1.4	12	19	12	---	18	6.7	3.5	1.6	1.9	5.9	4.8
30	1.6	11	13	15	---	15	3.3	3.8	1.7	9.0	4.0	3.2
31	1.8	---	11	15	---	13	---	3.0	---	41	3.5	---
TOTAL	193.14	457.5	256.2	352.3	160.9	453.6	182.7	123.6	250.1	163.56	258.2	552.9
MEAN	6.23	15.2	8.26	11.4	5.75	14.6	6.09	3.99	8.34	5.28	8.33	18.4
MAX	41	57	30	37	15	32	11	13	48	41	40	112
MIN	.35	1.8	3.2	5.0	2.4	2.4	3.3	2.1	1.6	.21	1.5	2.6
CFSM	.34	.84	.46	.63	.32	.81	.34	.22	.46	.29	.46	1.02
IN.	.40	.94	.53	.72	.33	.93	.38	.25	.51	.34	.53	1.14

CAL YR 1988 TOTAL 4144.47 MEAN 11.3 MAX 146 MIN .04 CFSM .63 IN. 8.52
WTR YR 1989 TOTAL 3404.70 MEAN 9.33 MAX 112 MIN .21 CFSM .52 IN. 7.00

e Estimated

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL

LOCATION.--Lat 41°49'22", long 88°10'23", in SW1/4NE1/4 sec.35, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank 400 ft upstream from Warrenville Forest Preserve Dam in Warrenville, 0.6 mi downstream from Spring Brook, and at mile 38.9.

DRAINAGE AREA.--90.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 688.59 ft above National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark).

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Flow slightly regulated by sewage-treatment plants upstream. Gage-height telemeter at station.

AVERAGE DISCHARGE.--21 years, 99.6 ft^3/s, 14.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,050 ft^3/s, Aug. 15, 1987, gage height, 5.85 ft; minimum daily, 7.8 ft^3/s, Sept. 14, 1971, Oct. 26, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1954, reached a stage of 5.54 ft, from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 5	1830	*750	*3.16	No other peak greater than base discharge.			

Minimum daily discharge, 15 ft^3/s, July 9, 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	45	64	73	109	e44	91	47	281	21	107	464
2	46	53	53	66	96	e42	83	47	265	20	74	540
3	48	47	50	58	84	e45	81	42	148	17	63	287
4	29	163	50	51	45	217	80	42	147	16	246	132
5	24	227	46	51	e55	247	74	46	96	16	632	100
6	23	115	48	64	e65	120	70	47	69	17	622	199
7	24	78	46	124	e55	83	67	43	58	19	332	307
8	23	66	37	320	e50	70	66	40	49	16	184	167
9	24	69	29	170	e47	78	57	39	48	15	167	229
10	29	268	29	119	e45	150	58	38	41	16	127	255
11	25	182	23	83	e42	199	59	32	36	17	104	148
12	29	133	21	108	e40	173	59	32	91	31	85	102
13	38	214	24	83	e43	142	65	32	123	41	139	112
14	32	140	24	70	e48	124	65	32	71	23	107	127
15	26	109	23	65	e47	164	56	33	51	19	93	84
16	31	453	16	56	e45	135	55	33	45	15	76	56
17	115	380	20	57	e39	103	57	33	44	15	56	46
18	301	164	19	58	e36	168	63	32	40	29	41	42
19	137	175	22	58	e35	134	65	47	34	211	36	37
20	80	175	25	58	e39	112	59	82	31	267	43	51
21	87	104	29	52	e49	99	58	50	30	225	43	45
22	89	80	35	51	e45	86	58	38	27	212	35	30
23	89	68	110	54	e38	81	57	37	24	97	38	28
24	107	61	65	52	e35	74	50	32	24	62	37	21
25	69	56	48	53	e42	73	50	56	24	52	32	20
26	58	118	39	74	e48	68	53	57	23	66	31	23
27	52	198	133	72	e45	64	43	37	24	69	30	22
28	53	130	242	71	e45	89	53	31	23	54	38	22
29	49	91	143	101	---	180	72	36	21	49	55	24
30	41	76	101	126	---	144	54	54	22	312	39	23
31	38	---	82	116	---	108	---	40	---	221	37	---
TOTAL	1836	4238	1696	2614	1412	3616	1878	1287	2010	2260	3749	3743
MEAN	59.2	141	54.7	84.3	50.4	117	62.6	41.5	67.0	72.9	121	125
MAX	301	453	242	320	109	247	91	82	281	312	632	540
MIN	20	45	16	51	35	42	43	31	21	15	30	20
CFSM	.66	1.56	.61	.93	.56	1.29	.69	.46	.74	.81	1.34	1.38
IN.	.76	1.74	.70	1.08	.58	1.49	.77	.53	.83	.93	1.54	1.54

CAL YR 1988 TOTAL 29240 MEAN 79.9 MAX 752 MIN 15 CFSM .88 IN. 12.03
WTR YR 1989 TOTAL 30339 MEAN 83.1 MAX 632 MIN 15 CFSM .92 IN. 12.48

e Estimated

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GBK 05.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
07...	1130	17002	17002	16	1810	7.90	11.0	12	6.3	29	240	360
NOV												
21...	1200	17002	17002	98	1110	7.60	6.0	13	9.2	16	K3000	340
JAN												
31...	1300	17002	17002	113	1290	7.80	6.5	3.7	11.8	18	K580	360
MAR												
02...	1300	17002	17002	42	1410	9.00	1.0	12	10.6	26	K10	420
APR												
06...	1300	17002	17002	77	1590	8.10	9.0	46	14.2	72	K70	420
MAY												
12...	1230	17002	17002	32	1770	8.00	15.0	8.1	8.6	30	200	430
JUN												
14...	1230	17002	17002	70	1320	7.90	20.5	42	6.3	47	K940	340
JUL												
20...	1230	17002	17002	296	690	8.50	20.5	64	6.0	54	K9800	190

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT											
07...	360	86	84	38	37	190	190	13	13	120	280
NOV											
21...	340	78	78	34	34	91	--	5.3	5.2	110	140
JAN											
31...	360	86	84	38	36	140	130	6.3	6.0	130	230
MAR											
02...	420	110	98	48	43	260	240	14	13	140	330
APR											
06...	420	100	97	46	44	170	--	7.9	6.9	140	270
MAY											
12...	430	96	96	45	45	210	210	12	11	150	300
JUN											
14...	340	87	78	39	34	140	140	8.3	7.6	100	220
JUL											
20...	190	52	43	24	19	72	72	7.3	6.4	61	110

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
OCT											
07...	720	35	8	13.0	0.310	0.005	2.46	2.31	1100	<50	50
NOV											
21...	--	22	7	5.00	0.550	0.003	0.710	0.620	730	<50	50
JAN											
31...	611	18	6	5.30	0.600	0.006	0.860	0.780	330	50	60
MAR											
02...	861	20	9	11.0	0.370	0.032	1.66	1.56	520	190	50
APR											
06...	--	357	78	6.90	0.120	0.003	1.49	0.980	2600	330	100
MAY											
12...	814	38	13	8.90	0.670	0.019	1.88	1.66	1100	290	100
JUN											
14...	577	246	47	5.60	0.460	0.015	1.07	0.650	4200	430	100
JUL											
20...	316	236	48	2.60	0.300	0.036	0.700	0.490	4000	80	100

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT											
07...	51	<0.5	<0.5	530	520	<3	<3	<5	<5	<5	<5
NOV											
21...	55	<0.5	<0.5	200	--	<3	<3	14	<5	5	<5
JAN											
31...	52	<0.5	<0.5	200	200	<3	<3	<5	<5	<5	<5
MAR											
02...	18	<0.5	<0.5	470	420	<3	<3	<5	<5	<5	<5
APR											
06...	67	<0.5	<0.5	280	270	<3	<3	10	<5	<5	<5
MAY											
12...	82	<2.0	<2	500	490	<3	<3	<5	<5	<5	<5
JUN											
14...	79	<0.5	<0.5	280	270	<3	<3	20	<5	<5	<5
JUL											
20...	49	<0.5	<0.5	140	130	<3	--	11	<5	6	<5

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT											
07...	16	9	1500	<50	<5	<5	40	19	--	7	8
NOV											
21...	9	6	1200	<50	<5	<5	45	25	--	17	11
JAN											
31...	5	<5	540	<50	<5	<5	53	42	--	6	6
MAR											
02...	8	6	610	<50	<5	<5	72	56	--	<5	<5
APR											
06...	20	8	5000	<50	8	<5	140	43	<0.05	46	<5
MAY											
12...	10	6	1300	<50	<5	<5	97	74	--	6	8
JUN											
14...	24	<5	6300	60	11	<5	150	51	--	30	14
JUL											
20...	24	<5	6200	60	11	<5	160	38	--	19	10

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
07...	<3	<3.0	840	830	<5	<5	<50	<50	0.010	--	1
NOV											
21...	<3	<3.0	320	330	<5	<5	<100	<100	<0.005	--	2
JAN											
31...	<3	<3.0	420	410	<5	<5	<50	<50	<0.005	--	1
MAR											
02...	<3	<3.0	790	730	<5	<5	<100	<100	<0.005	--	<1
APR											
06...	<3	<3.0	530	530	<5	<5	<100	<100	<0.005	7	1
MAY											
12...	<3	<3.0	700	690	6	6	<50	<50	<0.005	--	2
JUN											
14...	<3	<3.0	460	440	<5	<5	<100	<100	0.005	--	1
JUL											
20...	<3	<3.0	300	280	11	<5	100	<100	<0.005	--	<1

05540130 WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL

LOCATION.--Lat 41°43'13", long 88°07'55", in SW1/4NE1/4 sec.6, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on downstream side of Washington Street bridge, 3.5 mi southeast of Naperville and at mile 29.3.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--October 1988 to September 1989.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.28 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 977 ft^3/s, Sept. 1, 1989, gage height, 7.80 ft; minimum, 17 ft^3/s, Aug. 28, 1989.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 1,190 ft^3/s was measured during the flood of Mar. 4, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 18	--	500	unknown	Aug. 6	1740	542	6.56
Nov. 16	0205	661	7.11	Sept. 1	0325	*977	*7.80
Jan. 8	0735	473	6.35	Sept. 6	0935	697	7.04
June 1	1645	754	7.19				
July 20	0105	518	6.48				

Minimum discharge, 17 ft^3/s, Aug. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e26	63	70	89	118	e48	101	73	598	28	165	753
2	e59	59	59	89	102	e55	89	68	399	27	95	622
3	e64	57	54	87	89	e73	88	62	227	28	75	553
4	e45	183	50	74	e54	e345	84	60	200	26	116	395
5	e35	298	45	81	e43	308	78	70	123	25	426	354
6	e31	156	46	92	e35	162	71	62	84	23	529	429
7	e32	105	45	182	e42	121	68	58	65	29	379	411
8	e31	83	41	428	e48	98	66	53	55	24	172	337
9	e32	131	41	244	e52	106	63	54	48	22	128	276
10	e39	321	39	195	e52	154	56	54	44	22	125	327
11	e35	206	36	133	e53	198	62	47	40	30	108	308
12	e38	153	e129	140	e52	189	61	48	133	83	181	264
13	e52	201	e203	124	e54	156	61	46	156	46	234	228
14	e43	136	e44	101	e56	157	62	42	84	30	166	204
15	e35	190	e35	96	e54	175	62	42	59	24	140	178
16	e40	544	e33	82	e49	155	58	44	52	23	120	159
17	e110	422	e37	73	e48	145	61	40	48	22	102	142
18	e392	209	e39	72	e48	182	66	33	43	77	82	121
19	e210	205	e48	70	e49	154	71	54	42	254	71	107
20	e109	192	e47	68	e51	124	66	89	41	375	65	94
21	e114	131	50	64	e52	113	63	66	40	317	58	85
22	e118	98	e68	61	e51	98	60	47	38	277	52	79
23	e120	83	e140	59	e45	86	59	45	40	135	48	71
24	e140	71	e82	58	e46	97	58	44	34	85	41	67
25	e120	63	e64	62	e47	102	59	78	32	65	33	62
26	e100	120	e53	72	e50	101	61	84	31	63	28	57
27	e96	186	134	80	e47	106	66	69	31	101	21	52
28	85	142	283	72	e46	121	80	67	31	70	18	49
29	79	104	203	97	---	157	95	96	29	86	32	46
30	71	83	140	131	---	156	89	114	28	326	28	43
31	67	---	112	127	---	125	---	132	---	322	20	---
TOTAL	2568	4995	2470	3403	1533	4367	2084	1941	2875	3065	3858	6873
MEAN	82.8	166	79.7	110	54.7	141	69.5	62.6	95.8	98.9	124	229
MAX	392	544	283	428	118	345	101	132	598	375	529	753
MIN	26	57	33	58	35	48	56	33	28	22	18	43
CFSM	.67	1.35	.65	.89	.45	1.15	.56	.51	.78	.80	1.01	1.86
IN.	.78	1.51	.75	1.03	.46	1.32	.63	.59	.87	.93	1.17	2.08

WTR YR 1989 TOTAL 40032 MEAN 110 MAX 753 MIN 18 CFSM .89 IN. 12.11

e Estimated

05540195 ST. JOSEPH CREEK AT ROUTE 34 AT LISLE, IL

LOCATION.--Lat 41°48'06", long 88°04'08", in SW1/4SW1/4 sec.2, T.38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on downstream side of Ogden Avenue bridge on U.S. Highway 34 at Lisle, 0.8 mi upstream from confluence of East Branch Du Page River.

DRAINAGE AREA.--11.1 mi^2.

PERIOD OF RECORD.--October 1988 to September 1989.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 660.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft^3/s, Sept. 1, 1989, gage height, 9.35 ft; no flow part of each day Oct. 12, 15, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 4	1105	201	6.85	July 18	1820	277	7.55
Nov. 16	0220	258	7.38	Sept. 1	0350	*464	*9.35
June 1	0520	277	7.55	Sept. 6	0930	256	7.36

No flow part of each day Oct. 12, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.1	3.1	2.6	2.6	1.3	8.3	1.9	100	.23	4.0	154
2	8.3	1.5	2.5	2.4	1.9	1.3	7.6	1.8	18	25	3.0	16
3	.90	1.3	2.3	1.9	1.5	1.3	7.4	1.3	24	6.9	1.7	5.6
4	.56	37	1.9	1.6	1.1	9.7	6.4	2.3	11	2.2	8.5	3.8
5	.49	8.9	1.8	3.2	1.1	21	5.6	6.8	5.8	.64	20	3.1
6	.13	5.7	1.7	7.3	1.2	24	5.0	2.3	3.7	.46	4.7	73
7	.04	3.7	1.5	28	1.2	24	4.0	1.7	2.9	.36	3.1	15
8	.06	3.2	1.3	19	1.3	24	3.7	1.5	2.5	.35	1.4	6.3
9	.04	25	e1.1	6.4	1.3	24	3.3	1.5	2.2	.38	4.1	8.8
10	.18	30	e.88	4.7	1.3	22	2.7	1.0	2.4	.05	.78	4.0
11	.05	8.2	e.72	4.6	1.3	14	2.7	.73	1.6	11	3.3	2.8
12	.70	18	e.71	5.5	1.3	13	2.6	.70	18	21	24	1.5
13	.13	11	e.70	4.4	1.3	11	1.9	1.3	4.6	3.6	4.1	10
14	.01	6.3	e.70	4.1	1.3	16	1.8	4.5	3.4	1.9	2.1	2.7
15	2.1	52	e.72	3.8	1.3	14	1.6	.51	2.5	.69	1.5	1.6
16	3.2	87	e.72	3.0	1.3	9.8	2.4	.44	2.0	.66	.57	1.0
17	e58	27	e.69	2.6	1.3	25	2.6	.53	1.4	.52	.43	.74
18	e25	15	e.66	2.7	1.3	18	5.4	.53	.81	52	.39	.48
19	e7.0	27	e.67	2.6	1.3	13	3.5	24	.85	59	.43	.51
20	e7.4	13	e.66	2.6	1.3	10	3.4	5.8	.95	64	8.8	.44
21	e8.0	8.0	e.68	2.4	1.3	8.7	2.8	3.2	.87	42	1.5	.45
22	e6.0	5.8	e4.5	2.4	1.3	8.4	2.3	2.0	1.4	11	e7.9	.46
23	e17	5.2	e2.9	2.4	1.3	7.0	1.9	1.5	.40	5.7	e3.1	.35
24	4.7	4.5	e2.1	2.2	1.3	5.7	2.2	1.2	.34	3.6	e1.3	.31
25	3.4	4.0	e1.9	2.8	1.3	5.1	2.7	9.4	.12	2.1	e.88	.48
26	2.6	16	2.6	3.8	1.3	4.5	2.4	2.2	26	15	e.50	.52
27	2.3	12	23	2.8	1.3	7.8	1.4	1.0	4.3	4.6	e.42	.46
28	2.5	9.1	10	2.8	1.3	35	18	1.1	1.8	2.1	e4.2	.48
29	1.5	6.6	5.1	4.3	---	24	4.6	13	.66	19	1.4	.44
30	1.3	4.5	3.9	3.6	---	14	3.2	4.4	.37	35	.58	.21
31	1.2	---	3.2	3.1	---	9.7	---	10	---	7.5	2.2	---
TOTAL	164.99	457.6	84.91	145.6	37.9	426.3	123.4	110.14	244.87	398.54	120.88	315.53
MEAN	5.32	15.3	2.74	4.70	1.35	13.8	4.11	3.55	8.16	12.9	3.90	10.5
MAX	58	87	23	28	2.6	35	18	24	100	64	24	154
MIN	.01	1.1	.66	1.6	1.1	1.3	1.4	.44	.12	.05	.39	.21
CFSM	.48	1.37	.25	.42	.12	1.24	.37	.32	.74	1.16	.35	.95
IN.	.55	1.53	.28	.49	.13	1.43	.41	.37	.82	1.34	.41	1.06

WTR YR 1989 TOTAL 2630.66 MEAN 7.21 MAX 154 MIN .01 CFSM .65 IN. 8.82

e Estimated

05540200 ST. JOSEPH CREEK AT LISLE, IL

LOCATION.--Lat 41°48'09", long 88°04'40", in SW1/4SE1/4 sec.3, T.38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on downstream side of bridge on State Highway 53 at Lisle, 0.2 mi upstream from confluence with East Branch Du Page River.

DRAINAGE AREA.--11.8 mi^2.

PERIOD OF RECORD.--Annual maximum gage height, water years 1961-76. December 1985 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 657.83 ft above National Geodetic Vertical Datum of 1929. October 1970 to September 1976, crest-stage gage at same site at datum 3.04 ft higher. October 1961 to September 1970, crest-stage gage at same site at datum 6.09 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft^3/s, Aug. 14, 1987, gage height, 8.10 ft; maximum gage height, 10.63 ft, present datum, Dec. 30, 1972; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	1810	252	3.75	Aug. 12	1450	201	3.41
Nov. 16	0340	248	3.72	Sept. 1	0415	*648	*5.81
June 1	0530	385	4.52	Sept. 6	0930	301	4.04
July 18	1830	312	4.11				

No flow part of each day, Oct. 10, 12, 14, 15, July 10, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.15	5.4	e2.6	3.4	e.87	7.5	2.3	142	.26	4.6	213
2	12	.25	4.7	e2.3	2.7	e.92	7.6	2.2	22	22	3.8	18
3	3.5	.18	3.9	e2.1	e1.7	e5.4	7.8	1.8	25	7.8	1.9	8.6
4	1.6	35	3.3	e2.2	e.80	e22	7.0	2.7	13	3.0	8.0	6.8
5	.68	8.0	3.1	e4.5	e1.1	21	6.5	7.6	8.7	1.1	19	4.9
6	.35	4.6	2.6	e10	e1.4	15	6.0	3.1	6.5	.65	5.8	76
7	.15	2.5	2.1	e18	e1.6	12	4.9	2.5	5.8	.41	4.0	15
8	.11	1.9	1.7	e14	e1.4	11	4.2	2.4	5.5	.34	2.1	8.4
9	.07	17	e.96	e10	e1.2	11	3.6	2.6	6.3	.58	4.9	11
10	.03	31	e.74	e7.6	e1.1	14	3.2	2.0	7.2	.14	1.4	6.2
11	.09	10	e.74	6.9	e.98	13	3.2	1.7	5.3	11	3.5	4.6
12	.21	21	e.72	9.9	e1.1	12	3.2	1.6	19	18	28	1.9
13	.10	17	e.70	6.8	e1.3	10	2.7	2.3	6.3	4.6	7.0	11
14	.05	10	e.68	e4.1	e1.4	14	2.6	6.7	4.6	2.8	3.7	4.2
15	1.6	49	e.68	e3.0	e1.5	12	2.2	1.1	3.6	1.2	2.7	2.3
16	2.7	100	e.66	4.5	e1.3	8.3	3.2	1.1	2.7	1.1	1.2	1.5
17	63	30	e.65	2.8	e1.2	22	3.4	1.2	2.1	.64	.81	.99
18	28	17	e.64	2.4	e1.3	16	6.1	1.2	1.4	61	.66	.77
19	10	30	e.63	1.9	e1.4	11	4.1	24	1.3	57	.67	.62
20	9.0	17	e.63	e1.3	e1.1	9.6	3.6	7.0	1.5	63	8.4	.30
21	10	12	e.74	e.94	e.94	6.5	3.0	4.3	1.5	40	1.7	.40
22	6.9	8.7	e4.1	e.82	e.80	6.9	2.8	3.4	1.9	11	8.1	.23
23	21	7.2	e2.6	e.94	e.66	6.1	2.4	2.5	.39	6.4	1.5	.16
24	6.6	5.4	2.2	1.4	e.60	5.1	2.6	2.1	.36	4.5	1.0	.14
25	2.8	4.7	1.8	2.6	e.72	4.5	2.8	11	.11	2.9	.77	.14
26	1.6	17	5.8	4.2	e1.3	4.3	2.4	3.8	23	14	.40	.16
27	1.2	14	29	2.6	e1.0	6.9	1.7	2.1	3.7	4.9	.32	.15
28	2.0	11	14	2.5	e.90	32	16	2.2	1.8	2.5	4.2	.19
29	.39	9.0	e6.0	6.0	---	20	4.5	14	.75	20	1.2	.19
30	.23	7.1	e3.9	4.1	---	12	3.1	6.8	.42	31	.91	.16
31	.18	---	e3.2	3.8	---	9.1	---	12	---	7.3	2.4	---
TOTAL	186.26	497.68	108.57	146.80	35.90	354.49	133.9	141.3	323.73	401.12	134.64	398.00
MEAN	6.01	16.6	3.50	4.74	1.28	11.4	4.46	4.56	10.8	12.9	4.34	13.3
MAX	63	100	29	18	3.4	32	16	24	142	63	28	213
MIN	.03	.15	.63	.82	.60	.87	1.7	1.1	.11	.14	.32	.14
CFSM	.51	1.41	.30	.40	.11	.97	.38	.39	.91	1.10	.37	1.12
IN.	.59	1.57	.34	.46	.11	1.12	.42	.45	1.02	1.26	.42	1.25

CAL YR 1988 TOTAL 3178.56 MEAN 8.68 MAX 323 MIN .00 CFSM .74 IN. 10.02
WTR YR 1989 TOTAL 2862.39 MEAN 7.84 MAX 213 MIN .03 CFSM .66 IN. 9.02

e Estimated

05540210 EAST BRANCH DU PAGE RIVER AT ROUTE 34 BRIDGE AT LISLE, IL

LOCATION.--Lat 41°48'02", long 88°04'53", in SW1/4SE1/4 sec.3, T.38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, at bridge on U.S. Highway 34 in Lisle, 0.1 mi downstream from St. Joseph Creek, 0.3 mi upstream from Burlington Northern Railway bridge, and at mile 11.6.

DRAINAGE AREA.--51.4 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Discharges are estimated from daily discharge record for West Branch Du Page River near West Chicago (05539900).

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 07...	1030	17002	17002	7.8	1970	7.70	13.0	2.6	9.4	28	K160	410
NOV 21...	1130	17002	17002	47	1110	7.60	6.0	31	10.9	23	K30	290
JAN 31...	1130	17002	17002	33	1640	7.70	7.5	6.8	11.5	19	<10	370
MAR 02...	1130	17002	17002	9.2	2320	9.00	2.5	16	14.7	23	<10	480
APR 06...	1130	17002	17002	46	1890	8.10	9.5	3.4	13.1	25	K60	450
MAY 12...	1130	17002	17002	37	2120	7.90	14.0	2.7	12.5	26	K90	440
JUN 14...	1200	17002	17002	25	1460	7.90	21.0	46	8.1	41	K1000	350
JUL 20...	1100	17002	17002	90	762	8.20	20.0	100	7.4	45	K5300	210

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 07...	410	96	96	42	42	260	260	16	16	160	370
NOV 21...	290	70	68	30	29	100	100	6.5	6.2	100	150
JAN 31...	370	88	87	38	37	200	200	10	10	150	330
MAR 02...	480	110	110	48	48	350	--	16	17	170	460
APR 06...	450	110	100	47	46	250	250	11	9.8	160	370
MAY 12...	440	100	100	46	45	290	290	18	18	170	420
JUN 14...	350	88	82	39	36	190	180	12	11	130	260
JUL 20...	210	56	49	25	21	87	85	8.0	6.8	73	120

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05540210 EAST BRANCH DU PAGE RIVER AT ROUTE 34 BRIDGE AT LISLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
OCT											
07...	940	14	4	18.0	0.500	0.006	4.79	4.67	260	<50	30
NOV											
21...	464	31	10	5.50	0.130	<0.001	0.710	0.640	1000	<50	40
JAN											
31...	813	23	8	9.70	0.060	<0.001	1.23	1.16	400	90	40
MAR											
02...	--	21	7	19.0	0.090	0.009	2.54	2.46	540	260	<5
APR											
06...	942	9	6	17.0	0.080	0.002	1.27	1.16	650	490	50
MAY											
12...	1050	14	10	20.0	0.110	0.002	2.67	2.50	510	350	50
JUN											
14...	703	135	29	7.70	0.290	0.010	0.870	0.690	2700	470	70
JUL											
20...	358	167	28	3.40	0.170	0.011	0.510	0.380	3400	110	60

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT											
07...	--	<0.5	<0.5	610	600	<3	<3	<5	<5	<5	<5
NOV											
21...	33	<0.5	<0.5	260	250	<3	<3	11	<5	<5	<5
JAN											
31...	38	<0.5	<0.5	400	390	<3	<3	9	5	<5	<5
MAR											
02...	<5	<0.5	<0.5	580	570	<3	<3	<5	<5	<5	<5
APR											
06...	48	<0.5	<0.5	370	370	<3	<3	<5	<5	<5	<5
MAY											
12...	45	<2.0	<2	620	600	<3	<3	<5	<5	<5	<5
JUN											
14...	53	<0.5	<0.5	410	400	<3	5	25	<5	<5	<5
JUL											
20...	32	<0.5	<0.5	200	190	<3	--	8	<5	<5	<5

05540210 EAST BRANCH DU PAGE RIVER AT ROUTE 34 BRIDGE AT LISLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
OCT 07...	9	9	430	<50	<5	<5	25	19	--	6	<5
NOV 21...	7	5	1600	<50	<5	<5	38	18	--	17	13
JAN 31...	10	9	610	<50	<5	<5	46	34	--	7	7
MAR 02...	9	--	510	<50	<5	<5	49	44	--	<5	<5
APR 06...	11	10	510	<50	<5	<5	54	41	<0.05	<5	<5
MAY 12...	12	10	320	<50	<5	<5	43	37	--	<5	5
JUN 14...	12	6	4000	<50	9	<5	75	21	--	23	11
JUL 20...	14	6	5300	72	10	<5	120	21	--	21	9

DATE	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT 07...	<3	<3.0	1300	--	<5	<5	<100	<100	0.010	--	<1
NOV 21...	<3	<3.0	440	440	<5	<5	<50	<50	<0.005	--	1
JAN 31...	<3	<3.0	800	780	<5	<5	<50	<50	<0.005	--	1
MAR 02...	<3	<3.0	1200	1200	<5	<5	<100	<100	<0.005	--	<1
APR 06...	<3	<3.0	900	890	<5	<5	<100	<100	<0.005	8	1
MAY 12...	<3	<3.0	1300	1300	<5	<5	<50	<50	<0.005	--	2
JUN 14...	<3	<3.0	780	740	<5	<5	<100	<100	0.010	--	<1
JUL 20...	<3	<3.0	350	330	8	<5	110	<100	<0.005	--	<1

05540250 EAST BRANCH DU PAGE RIVER AT BOLINGBROOK, IL

LOCATION.--Lat 41°43'05", long 88°04'14", in NE1/4SE1/4 sec.3, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on downstream side of Royce Road bridge, 0.5 mi north of Bolingbrook, 4.8 mi northwest of Lemont, and at mile 6.0.

DRAINAGE AREA.--75.8 mi^2.

PERIOD OF RECORD.--Annual maximum gage height, water years 1962-70. October 1988 to September 1989.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.28 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1988, nonrecording gage at datum 17.07 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 497 ft^3/s, June 1, 1989, gage height, 18.23 ft; minimum, 16 ft^3/s, May 28, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 17	2145	357	17.18	July 30	0405	380	17.36
Nov. 16	0945	456	17.93	Sept. 1	2150	437	17.79
June 1	1350	*497	*18.23	Sept. 6	1215	380	17.36
July 20	0625	417	17.64				

Minimum discharge, 16 ft^3/s, May 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	34	63	63	69	35	78	43	422	e30	94	406
2	87	32	58	60	53	35	72	41	335	e33	74	380
3	54	29	56	58	48	45	80	37	166	e36	62	212
4	42	136	52	52	41	219	72	38	145	e33	101	118
5	35	136	52	54	45	175	64	67	108	e29	177	102
6	31	107	49	94	45	112	59	47	92	30	149	265
7	29	92	46	166	42	89	51	41	73	29	117	221
8	30	80	45	249	40	81	51	41	54	28	91	135
9	34	103	40	139	37	88	47	41	48	27	89	133
10	30	263	39	103	39	106	45	36	39	27	68	138
11	32	129	40	88	40	117	45	34	30	33	65	111
12	30	130	42	104	43	110	40	33	60	88	110	94
13	30	157	42	80	45	96	39	33	98	60	138	114
14	29	103	42	71	46	99	40	31	e71	47	94	114
15	32	188	e34	64	44	124	40	32	e64	40	89	94
16	48	414	e34	61	38	92	39	32	e56	35	76	78
17	145	236	e33	55	36	111	46	32	e52	35	66	71
18	e249	144	e32	53	38	162	54	29	e48	89	58	65
19	e100	164	e31	51	39	114	48	107	e45	262	51	62
20	e68	127	e32	61	42	105	46	112	e42	325	88	56
21	e74	100	e33	49	43	92	41	68	e41	282	63	54
22	e76	80	e33	45	43	80	39	59	e38	163	79	49
23	e132	69	e54	45	36	72	37	53	e40	108	63	47
24	90	64	87	44	37	67	38	48	e38	77	51	43
25	65	58	71	46	37	63	35	74	e37	62	48	45
26	53	111	62	63	41	60	40	64	e35	61	46	46
27	46	134	158	52	39	70	34	31	e37	69	50	45
28	46	101	166	50	37	152	87	20	e35	59	71	40
29	39	83	110	74	---	172	59	54	e33	61	55	35
30	36	72	86	76	---	115	48	75	e31	269	53	40
31	36	---	71	74	---	94	---	89	---	138	56	---
TOTAL	1864	3676	1793	2344	1183	3152	1514	1542	2413	2665	2492	3413
MEAN	60.1	123	57.8	75.6	42.2	102	50.5	49.7	80.4	86.0	80.4	114
MAX	249	414	166	249	69	219	87	112	422	325	177	406
MIN	29	29	31	44	36	35	34	20	30	27	46	35
CFSM	.79	1.62	.76	1.00	.56	1.34	.67	.66	1.06	1.13	1.06	1.50
IN.	.91	1.80	.88	1.15	.58	1.55	.74	.76	1.18	1.31	1.22	1.67

WTR YR 1989 TOTAL 28051 MEAN 76.9 MAX 422 MIN 20 CFSM 1.01 IN. 13.77

e Estimated

05540275 SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL

LOCATION.--Lat 41°43'33", long 88°09'46", in SW1/4SW1/4 sec.36, T.38 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank at upstream side of bridge on 87th Street, 3.0 mi south of Naperville, and at mile 2.9.

DRAINAGE AREA.--9.90 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 647.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft^3/s, Apr. 6, 1988, gage height, 6.36 ft; no flow Oct. 11, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 45 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 16	1015	66	5.29	July 30	0930	67	4.76
Jan. 8	0045	51	4.19	Sept. 1	0945	66	4.66
Mar. 4	1900	48	4.01	Sept. 6	1530	62	4.45
June 1	1600	*80	*5.93				

No flow Oct. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.36	4.2	4.3	6.2	2.5	8.9	2.2	64	.29	35	51
2	.87	.32	4.5	e3.8	5.3	2.3	8.2	1.9	73	.31	17	41
3	.75	.28	3.9	e3.4	4.8	2.2	8.0	1.6	57	.39	9.0	26
4	1.2	3.8	2.9	e3.2	e3.7	31	7.2	1.5	49	.33	6.2	17
5	.44	6.4	2.6	3.1	e3.6	23	6.7	2.3	39	.42	5.8	13
6	.24	4.3	2.7	5.2	e3.5	16	5.3	1.7	30	.44	5.0	38
7	.23	3.9	2.7	18	e3.4	12	5.1	1.5	20	.36	3.7	44
8	.23	3.0	2.4	35	e3.2	11	4.8	1.2	12	.30	2.9	32
9	.17	4.6	2.4	27	e2.8	13	4.3	1.1	9.0	.26	2.4	33
10	.08	27	2.1	15	e2.6	16	3.7	1.1	4.6	.17	1.9	29
11	.00	14	1.9	14	e2.7	16	3.7	.94	3.6	.14	2.1	19
12	.01	12	2.0	18	e2.8	13	3.5	.82	16	5.1	10	9.9
13	.02	14	2.0	12	e3.3	12	3.1	.88	14	3.0	13	9.8
14	.03	8.5	1.8	9.4	e3.6	13	3.2	.80	8.9	2.5	5.7	8.9
15	.03	11	1.3	7.7	e3.2	17	3.0	.80	6.5	1.8	3.9	7.5
16	.20	55	e1.4	6.5	e3.0	13	2.7	.73	5.3	1.3	2.6	4.4
17	8.1	30	e1.5	5.9	e2.8	14	3.4	.59	3.5	.85	1.9	3.5
18	20	18	e1.7	5.4	e2.7	17	4.1	.82	3.5	1.3	1.3	2.7
19	8.6	21	1.8	5.0	e2.8	12	3.8	2.2	3.0	12	1.1	2.3
20	5.5	17	1.7	4.5	e2.9	12	3.1	4.2	2.5	21	1.8	2.5
21	3.6	12	2.0	4.1	e3.0	11	2.7	1.7	2.1	15	1.3	2.6
22	2.5	10	2.7	3.6	e3.2	11	2.5	1.7	1.8	7.1	2.2	1.6
23	4.5	6.9	9.2	3.4	e3.2	11	2.6	1.2	1.9	4.2	2.2	1.9
24	4.7	5.8	5.0	3.3	e3.1	11	2.3	1.2	1.4	3.1	1.5	1.4
25	2.5	4.8	3.5	3.3	e3.3	8.9	2.2	4.9	1.1	2.0	1.1	1.1
26	1.2	9.0	5.8	4.3	2.7	6.7	2.3	2.7	1.1	9.3	.95	1.1
27	.75	11	14	4.4	2.7	7.0	1.9	1.4	1.1	35	.97	1.1
28	.69	7.5	e11	5.0	2.5	14	2.2	1.0	.79	11	.75	1.2
29	.56	5.8	e8.0	5.5	---	23	3.8	1.5	.65	5.7	.95	1.1
30	.48	4.9	6.4	6.3	---	14	2.7	1.3	.44	59	.88	.84
31	.40	---	5.1	6.4	---	11	---	1.3	---	49	.82	---
TOTAL	68.74	332.16	120.2	256.0	92.6	396.6	121.0	48.78	436.78	252.66	145.92	408.44
MEAN	2.22	11.1	3.88	8.26	3.31	12.8	4.03	1.57	14.6	8.15	4.71	13.6
MAX	20	55	14	35	6.2	31	8.9	4.9	73	59	35	51
MIN	.00	.28	1.3	3.1	2.5	2.2	1.9	.59	.44	.14	.75	.84
CFSM	.22	1.12	.39	.83	.33	1.29	.41	.16	1.47	.82	.48	1.38
IN.	.26	1.25	.45	.96	.35	1.49	.45	.18	1.64	.95	.55	1.53

CAL YR 1988 TOTAL 2203.89 MEAN 6.02 MAX 66 MIN .00 CFSM .61 IN. 8.28
WTR YR 1989 TOTAL 2679.88 MEAN 7.34 MAX 73 MIN .00 CFSM .74 IN. 10.07

e Estimated

05540275 SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT									
25...	1120	81700	80020	2.5	550	8.10	4.5	11.3	100
NOV									
16...	1230	81700	80020	61	358	8.00	8.5	8.9	>6000
DEC									
20...	1045	81700	80020	1.4	643	9.30	1.0	12.1	K20
JAN									
18...	1030	81700	80020	5.0	634	9.10	2.5	9.3	K10
FEB									
22...	1200	81700	80020	3.2	800	9.80	0.0	15.8	K7
MAR									
20...	1130	81700	80020	12	770	8.20	3.0	13.8	40
APR									
19...	1015	81700	80020	3.8	788	8.80	7.5	10.6	16
MAY									
24...	1115	81700	80020	0.84	896	8.00	18.5	6.0	150
JUN									
21...	1200	81700	80020	2.1	718	7.80	24.0	7.5	270
JUL									
18...	1100	81700	80020	0.68	730	7.70	20.0	7.0	1700
AUG									
22...	0945	81700	80020	0.98	600	7.60	21.5	5.5	2500
SEP									
26...	1200	81700	80020	1.0	684	8.40	10.5	9.7	200

DATE	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)
OCT									
25...	85	150	43	1.10	0.044	0.36	0.40	1.5	0.043
NOV									
16...	--	>6000	604	1.60	0.072	2.9	3.0	4.6	0.083
DEC									
20...	220	--	20	1.20	0.098	0.40	0.50	1.7	0.062
JAN									
18...	K1700	K40	15	2.80	0.047	0.45	0.50	3.3	0.063
FEB									
22...	64	K9	15	2.30	0.072	0.73	0.80	3.1	0.025
MAR									
20...	2200	110	12	4.70	<0.002	--	0.60	5.3	0.020
APR									
19...	410	32	9	3.60	0.013	0.79	0.80	4.4	0.021
MAY									
24...	700	190	46	0.313	0.408	0.69	1.1	1.4	0.057
JUN									
21...	1500	300	39	3.30	0.052	0.85	0.90	4.2	0.054
JUL									
18...	2500	370	3	0.592	0.067	3.5	3.6	4.2	0.090
AUG									
22...	1600	2000	31	0.296	0.073	0.73	0.80	1.1	0.052
SEP									
26...	500	230	3	0.108	0.056	0.34	0.40	0.51	0.027

05540290 DU PAGE RIVER NEAR NAPERVILLE, IL

LOCATION.--Lat 41°41'24", long 88°09'58", in SE1/4NE1/4 sec.14, T.37 N., R.9 E., Will County, Hydrologic Unit 07120004, at bridge on Plainfield-Naperville Road, 1.0 mi downstream from Spring Brook, 1.5 mi downstream from the confluence of the East and West Branches, 6.0 mi south of Naperville, and at mile 26.1.

DRAINAGE AREA.--220 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1968-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GB 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT 07...	0900	17002	17002	72	1860	7.50	9.5	8.8	6.8	24	260
NOV 21...	1000	17002	17002	285	1160	7.80	7.0	17	8.0	13	520
JAN 31...	0930	17002	17002	222	1500	7.50	6.5	4.4	11.6	16	K60
MAR 02...	1000	17002	17002	88	2170	8.70	1.5	8.4	14.0	26	K30
APR 06...	1000	17002	17002	170	1810	8.70	8.5	4.4	13.3	61	K50
MAY 12...	1000	17002	17002	93	2080	8.10	14.0	2.9	12.6	25	370
JUN 14...	1000	17002	17002	209	1330	8.40	20.0	36	6.9	38	1100

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 07...	460	460	110	100	49	47	240	240	13	13	37
NOV 21...	320	320	79	74	35	33	100	99	6.4	5.9	34
JAN 31...	370	370	90	87	39	38	160	160	7.9	7.8	12
MAR 02...	480	480	120	110	53	50	310	290	15	14	17
APR 06...	440	450	100	100	47	46	190	190	7.2	6.6	5
MAY 12...	480	480	110	110	50	50	250	250	13	13	6
JUN 14...	360	360	92	83	41	36	150	150	9.5	8.9	333

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)
OCT											
07...	7	14.0	0.170	0.001	1.96	1.78	780	<50	40	39	<0.5
NOV											
21...	10	5.20	0.190	0.002	0.920	0.810	760	<50	50	43	<0.5
JAN											
31...	6	6.60	0.900	0.004	0.950	0.850	300	90	50	47	<0.5
MAR											
02...	7	12.0	0.690	0.033	2.03	1.96	440	260	10	10	<0.5
APR											
06...	4	7.80	0.080	0.006	1.04	0.970	460	330	60	58	<0.5
MAY											
12...	6	12.0	0.120	0.004	1.65	1.62	480	350	60	59	<2.0
JUN											
14...	57	6.80	0.280	0.027	1.02	0.630	3700	420	90	60	<0.5

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)
OCT											
07...	<0.5	420	410	<3	<3	<5	<5	<5	<5	8	6
NOV											
21...	<0.5	230	220	<3	<3	10	<5	<5	<5	8	<5
JAN											
31...	<0.5	240	240	<3	<3	19	<5	<5	<5	13	<5
MAR											
02...	<0.5	410	380	<3	<3	<5	<5	<5	<5	5	5
APR											
06...	<0.5	260	260	<3	<3	<5	<5	<5	<5	5	6
MAY											
12...	<2	410	390	<3	<3	<5	<5	<5	<5	<5	6
JUN											
14...	<0.5	260	240	<3	<3	20	<5	<5	<5	17	<5

05540290 DU PAGE RIVER NEAR NAPERVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT 07...	1300	<50	<5	<5	34	13	--	<5	<5	<3
NOV 21...	1200	<50	<5	<5	35	16	--	14	10	<3
JAN 31...	450	<50	<5	<5	38	30	--	9	<5	<3
MAR 02...	370	73	<5	<5	35	27	--	<5	<5	<3
APR 06...	180	<50	<5	<5	33	29	<0.05	<5	<5	<3
MAY 12...	270	<50	<5	<5	30	22	--	7	6	<3
JUN 14...	5500	<50	12	<5	130	31	--	26	11	<3

DATE	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 07...	<3.0	670	660	<5	<5	<50	<50	<0.005	--	--
NOV 21...	<3.0	400	380	<5	<5	<100	<100	<0.005	--	--
JAN 31...	<3.0	510	500	<5	<5	<100	<100	<0.005	--	--
MAR 02...	<3.0	800	750	<5	<5	<50	<50	<0.005	--	--
APR 06...	<3.0	550	540	<5	<5	<100	<100	<0.005	6	1
MAY 12...	<3.0	670	660	<5	5	<50	<50	<0.005	--	--
JUN 14...	<3.0	450	430	<5	<5	<100	<100	<0.005	--	--

ILLINOIS RIVER BASIN

05540500 DU PAGE RIVER AT SHOREWOOD, IL

LOCATION.--Lat 41°31'20", long 88°11'35", in SE1/4SW1/4 sec.10, T.35 N., R.9 E., Will County, Hydrologic Unit 07120004, on left bank 400 ft upstream from bridge on U.S. Highway 52 at Shorewood, 3.8 mi downstream from Lily Cache Creek and at mile 10.6.

DRAINAGE AREA.--324 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year. Published as "at Troy" 1940-65.

REVISED RECORDS.--WSP 1035: 1944. WSP 1055: 1942(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 564.62 ft above National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Apr. 11, 1941, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Some regulation by sewage-treatment plants in upstream watershed. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years, 268 ft^3/s, 11.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s, Oct. 11, 1954, gage height, 11.06 ft; minimum, 0.2 ft^3/s, Nov. 17, 1955, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	2030	*2,120	*4.61	No other peak greater than base discharge.			

Minimum discharge, 38 ft^3/s, Dec. 11, Feb. 23, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	106	245	e240	300	e120	285	163	1260	100	339	1010
2	113	101	219	e210	268	e130	262	146	1620	96	215	1330
3	191	100	207	e185	235	e140	272	141	1010	130	168	905
4	135	131	191	e175	167	416	269	139	833	111	148	494
5	108	473	184	e180	104	773	241	169	580	95	515	340
6	96	330	179	252	e200	506	223	157	426	88	833	571
7	91	246	174	377	e190	344	214	141	327	84	555	926
8	90	203	160	999	e180	280	200	134	263	84	320	629
9	91	201	151	678	e170	284	195	128	231	82	229	494
10	92	648	146	536	e160	400	182	125	205	79	221	633
11	90	565	101	369	e165	505	180	111	185	81	165	482
12	90	371	157	405	e170	502	178	107	244	235	205	368
13	86	497	207	363	e180	431	169	104	464	190	343	338
14	89	411	185	292	e200	389	171	107	313	128	240	426
15	87	355	133	263	e175	522	171	108	238	102	211	345
16	111	1270	82	236	e150	448	164	106	207	92	175	282
17	150	1080	164	227	e140	374	172	104	178	86	141	238
18	677	665	218	216	e135	547	178	101	161	95	118	210
19	436	556	231	213	e145	485	199	117	152	516	104	197
20	266	593	179	213	e150	407	168	333	142	724	123	180
21	203	438	148	197	e140	363	162	220	142	693	141	196
22	191	343	145	187	e120	313	153	158	132	601	115	178
23	190	301	367	188	e110	282	153	137	129	378	143	153
24	267	257	357	182	e120	262	149	131	137	240	105	146
25	202	231	259	180	e150	253	141	256	119	185	86	138
26	159	260	215	210	e140	240	138	279	116	162	80	139
27	138	461	302	231	e130	223	146	191	158	231	83	131
28	126	415	643	215	e130	315	186	152	129	184	86	127
29	122	327	499	227	---	560	243	146	115	161	118	124
30	114	281	395	308	---	448	190	200	104	587	104	121
31	111	---	e300	315	---	347	---	174	---	584	99	---
TOTAL	5003	12216	7143	9069	4624	11609	5754	4785	10320	7204	6528	11851
MEAN	161	407	230	293	165	374	192	154	344	232	211	395
MAX	677	1270	643	999	300	773	285	333	1620	724	833	1330
MIN	86	100	82	175	104	120	138	101	104	79	80	121
CFSM	.50	1.26	.71	.90	.51	1.16	.59	.48	1.06	.72	.65	1.22
IN.	.57	1.40	.82	1.04	.53	1.33	.66	.55	1.18	.83	.75	1.36

CAL YR 1988 TOTAL 106969 MEAN 292 MAX 2630 MIN 73 CFSM .90 IN. 12.28
WTR YR 1989 TOTAL 96106 MEAN 263 MAX 1620 MIN 79 CFSM .81 IN. 11.03

e Estimated

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-76, 1978 to current year

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOCITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)
OCT												
13...	0830	81700	17002	10	110	E1.50	1.93	82	1970	8.10	6.0	7.0
13...	0831	81700	80020	10	110	E1.50	1.93	82	1890	8.31	6.0	--
13...	0835	81700	17002	10	110	E1.50	1.93	82	1970	8.10	6.0	7.0
13...	0836	81700	80020	10	110	E1.50	1.93	82	1890	8.31	6.0	--
NOV												
09...	0815	81700	17002	10	115	E1.25	2.17	173	1340	7.70	5.0	7.5
09...	0816	81700	80020	10	115	E1.25	2.17	173	1280	8.59	5.0	--
DEC												
08...	0830	81700	17002	11	115	E2.00	2.13	156	1540	9.70	-2.5	1.0
08...	0831	81700	80020	11	115	E2.00	2.13	156	1500	8.47	-2.5	--
JAN												
12...	1300	81700	17002	11	120	E1.75	2.63	417	1240	7.85	-1.0	4.0
12...	1301	81700	80020	11	120	E1.75	2.63	417	1140	8.18	-1.0	--
FEB												
08...	1130	81700	17002	3	120	E2.50	2.74	E180	1500	7.30	-11.0	0.0
08...	1131	81700	80020	3	120	E2.50	2.74	E180	1710	8.20	-11.0	--
MAR												
09...	1200	81700	17002	10	113	E2.00	2.43	274	1560	7.70	9.0	5.5
09...	1201	81700	80020	10	113	E2.00	2.43	274	1580	8.62	9.0	--
APR												
06...	1130	81700	17002	9	119	E3.00	2.33	224	1550	9.00	15.5	9.0
06...	1131	81700	80020	9	119	E3.00	2.33	224	1490	8.66	15.5	--
06...	1145	81700	17002	9	119	E3.00	2.33	224	1550	9.00	15.5	9.0
06...	1146	81700	80020	9	119	E3.00	2.33	224	1490	8.62	15.5	--
MAY												
12...	1100	81700	17002	10	110	E2.00	2.07	113	1730	8.80	18.0	14.5
12...	1101	81700	80020	10	110	E2.00	2.07	113	1780	9.02	18.0	--
JUN												
07...	1120	81700	17002	11	115	E3.00	2.49	323	1250	7.70	--	22.0
07...	1121	81700	80020	11	115	E3.00	2.49	323	1150	7.95	--	--
JUL												
12...	1245	81700	17002	11	115	E3.00	2.46	301	1670	8.50	25.0	25.5
12...	1246	81700	80020	11	115	E3.00	2.46	301	1600	8.66	25.0	--
AUG												
02...	0845	81700	80020	11	120	E1.50	2.40	229	1130	8.03	29.0	--
10...	0820	81700	17002	11	122	E2.50	2.41	234	1240	7.80	22.0	21.0
10...	0821	81700	80020	11	122	E2.50	2.41	234	1210	8.06	22.0	--
SEP												
01...	0745	81700	17002	11	120	E2.50	2.82	467	922	7.70	25.5	20.5
01...	0746	81700	80020	11	120	E2.50	2.82	467	802	7.85	25.5	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)
OCT											
13...	2.9	10.6	19	600	--	450	180	<1.0	100	100	48
13...	--	--	--	--	--	--	-	0	--	--	--
13...	2.7	10.6	22	110	--	190	0	<1.0	49	49	17
13...	--	--	--	--	--	--	--	0	--	--	--
NOV											
09...	5.2	10.4	24	--	--	360	130	<1.0	84	82	38
09...	--	--	--	--	--	--	--	0	--	--	--
DEC											
08...	3.1	12.2	10	--	--	440	190	<0.1	100	100	47
08...	--	--	--	K23	K30	--	--	0	--	--	--
JAN											
12...	3.1	12.3	18	--	--	340	110	8.0	81	78	37
12...	--	--	--	--	--	--	--	8.0	--	--	--
FEB											
08...	1.9	13.5	14	--	--	430	160	15	100	98	46
08...	--	--	--	27	K17	--	--	15	--	--	--
MAR											
09...	3.4	16.2	17	--	--	410	190	<1.0	100	94	45
09...	--	--	--	K3	K3	--	--	0	--	--	--
APR											
06...	2.4	15.4	17	--	--	440	190	<1.0	100	100	46
06...	--	--	--	K9	K23	--	--	0	--	--	--
06...	2.9	15.4	16	--	--	440	190	<1.0	100	100	46
06...	--	--	--	K9	K10	--	--	0	--	--	--
MAY											
12...	4.4	13.6	21	K10	--	430	170	<1.0	100	97	48
12...	--	--	--	--	K12	--	--	0	--	--	--
JUN											
07...	6.9	7.1	30	--	--	380	160	8.0	91	86	41
07...	--	--	--	220	253	--	--	8.0	--	--	--
JUL											
12...	20	9.4	51	--	--	380	150	<1.0	86	86	41
12...	--	--	--	K3900	14200	--	--	0	--	--	--
AUG											
02...	--	--	--	--	--	--	--	12	--	--	--
10...	21	7.0	34	--	--	340	130	4.0	84	78	37
10...	--	--	--	280	300	--	--	4.0	--	--	--
SEP											
01...	78	6.7	45	--	--	220	80	4.0	65	50	29
01...	--	--	--	K9300	12500	220	220	4.0	--	51	--

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
13...	47	230	230	13	13	--	--	--	--	269	190
13...	--	--	--	--	--	0	329	270	270	--	--
13...	17	56	56	5.1	5.0	--	--	--	--	255	180
13...	--	--	--	--	--	0	306	250	251	--	--
NOV											
09...	37	140	140	9.1	8.8	--	--	--	--	230	--
09...	--	--	--	--	--	60	160	230	231	--	--
DEC											
08...	46	160	160	9.2	9.0	--	--	--	--	256	--
08...	--	--	--	--	--	60	193	260	258	--	--
JAN											
12...	35	110	110	5.0	4.7	--	--	--	--	227	--
12...	--	--	--	--	--	0	277	230	227	--	--
FEB											
08...	44	170	170	8.5	8.3	--	--	--	--	269	--
08...	--	--	--	--	--	0	328	270	269	--	--
MAR											
09...	42	180	170	7.6	7.4	--	--	--	--	222	--
09...	--	--	--	--	--	0	272	220	223	--	--
APR											
06...	46	150	--	6.8	6.3	--	--	--	--	252	--
06...	--	--	--	--	--	0	309	250	253	--	--
06...	46	150	150	6.8	6.9	--	--	--	--	252	--
06...	--	--	--	--	--	0	294	240	241	--	--
MAY											
12...	46	210	200	10	11	--	--	--	--	258	160
12...	--	--	--	--	--	0	309	260	253	--	--
JUN											
07...	39	100	100	5.4	4.0	--	--	--	--	213	99
07...	--	--	--	--	--	0	259	210	212	--	--
JUL											
12...	41	190	190	10	10	--	--	--	--	230	150
12...	--	--	--	--	--	0	281	230	230	--	--
AUG											
02...	--	--	--	--	--	0	231	190	189	--	--
10...	34	120	120	8.5	8.5	--	--	--	--	210	110
10...	--	--	--	--	--	0	257	210	211	--	--
SEP											
01...	23	81	79	6.6	4.6	--	--	--	--	140	78
01...	23	--	78	--	6.1	0	171	140	140	--	--

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS SOLVED (MG/L AS CL) (00940)	FLUORIDE, TOTAL (MG/L AS F) (00951)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
OCT											
13...	190	370	0.9	0.85	--	--	1200	1170	19	7	--
13...	--	--	--	--	--	--	--	--	--	--	0.040
13...	190	360	0.9	0.90	--	--	1200	891	16	4	--
13...	--	--	--	--	--	--	--	--	--	--	0.040
NOV											
09...	140	200	0.5	--	--	--	[illegible]	777	40	7	--
09...	--	--	--	--	--	0.067	--	--	--	--	0.070
DEC											
08...	170	250	0.6	--	--	--	932	933	13	1	--
08...	--	--	--	--	--	--	--	--	--	--	0.120
JAN											
12...	110	190	0.4	--	--	--	--	699	50	9	--
12...	--	--	--	--	--	--	--	--	--	--	0.080
FEB											
08...	160	270	0.5	--	--	--	1020	959	6	2	--
08...	--	--	--	--	--	0.074	--	--	--	--	0.100
MAR											
09...	120	270	0.3	--	--	--	889	978	13	3	--
09...	--	--	--	--	--	--	--	--	--	--	0.090
APR											
06...	140	250	0.4	--	--	--	893	--	8	4	--
06...	--	--	--	--	--	--	--	--	--	--	0.060
06...	140	250	0.4	--	--	--	876	874	8	3	--
06...	--	--	--	--	--	--	--	--	--	--	0.060
MAY											
12...	160	320	0.7	0.70	--	--	1130	991	21	5	--
12...	--	--	--	--	--	0.090	--	--	--	--	0.110
JUN											
07...	100	160	0.4	0.36	--	--	769	666	130	19	--
07...	--	--	--	--	--	--	--	--	--	--	0.190
JUL											
12...	150	280	0.7	0.72	--	--	961	925	165	25	--
12...	--	--	--	--	--	--	--	--	--	--	0.070
AUG											
02...	--	--	--	--	--	--	--	-	--	--	--
10...	120	180	0.4	0.44	--	--	744	688	296	44	--
10...	--	--	--	--	--	0.060	--	--	--	--	0.060
SEP											
01...	77	120	0.3	0.34	--	--	499	452	440	60	--
01...	76	110	--	0.30	6.6	--	466	370	--	--	0.030

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)
OCT											
13...	13.0	13.0	<0.100	<0.100	<0.002	-	0.80	--	2.30	2.20	--
13...	--	14.0	--	0.050	--	0.95	1.0	1.0	2.30	2.20	2.10
13...	13.0	13.0	<0.100	<0.100	<0.002	--	0.90	--	2.20	2.10	--
13...	--	13.0	--	0.050	--	0.95	1.1	1.0	2.20	2.20	2.40
NOV											
09...	6.70	6.60	0.300	0.300	0.003	--	1.4	--	1.20	1.10	--
09...	--	7.10	--	0.360	--	1.0	1.4	1.4	1.10	1.10	1.10
DEC											
08...	8.80	8.80	0.280	0.260	0.090	--	1.2	--	1.30	1.20	--
08...	--	8.90	--	0.230	--	1.2	1.6	1.4	1.20	1.10	1.10
JAN											
12...	7.50	7.40	0.340	0.340	0.003	--	1.3	--	0.560	0.440	--
12...	--	7.30	--	0.350	--	0.85	1.4	1.2	0.570	0.480	0.430
FEB											
08...	8.70	9.00	0.590	0.580	0.001	--	1.3	--	1.23	1.19	--
08...	--	8.50	--	0.670	--	1.1	1.8	1.8	1.20	1.10	1.00
MAR											
09...	7.80	7.50	0.340	0.300	0.002	--	1.3	--	0.700	0.660	--
09...	--	7.00	--	0.390	--	0.31	0.70	0.70	0.710	0.660	0.620
APR											
06...	7.70	7.70	0.180	0.180	0.028	--	0.70	--	0.670	0.650	--
06...	--	7.10	--	0.060	--	0.94	1.0	1.0	0.720	0.650	0.640
06...	7.50	7.50	0.200	0.140	0.031	--	1.0	--	0.670	0.660	--
06...	--	7.10	--	0.060	--	0.84	0.90	0.90	0.720	0.660	0.620
MAY											
12...	7.80	--	0.120	--	0.018	--	0.20	--	1.20	0.940	--
12...	--	7.20	--	0.030	--	1.1	1.4	1.1	1.00	0.940	0.880
JUN											
07...	9.00	9.40	0.350	0.320	0.007	--	1.6	--	0.610	0.380	--
07...	--	9.00	--	0.280	--	0.62	1.1	0.90	0.420	0.400	0.400
JUL											
12...	5.70	5.50	<0.100	<0.100	<0.017	--	3.8	--	1.40	1.00	--
12...	--	5.50	--	0.040	--	0.76	1.1	0.80	1.80	1.00	0.920
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	4.80	4.80	0.140	0.140	0.004	--	1.4	--	0.960	0.710	--
10...	--	5.10	--	0.090	--	1.0	1.8	1.1	0.880	0.780	0.720
SEP											
01...	3.80	3.80	0.320	0.230	0.007	--	2.1	--	1.10	0.730	--
01...	--	3.80	0.250	0.190	--	0.81	2.4	1.0	1.10	0.600	0.600

ILLINOIS RIVER BASIN

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
13...	370	<50	--	2	2	50	42	<0.5	<0.5	470	470
13...	--	--	--	--	--	--	--	--	--	--	--
13...	160	<50	--	2	2	10	11	<0.5	<0.5	170	170
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	940	110	--	1	1	50	40	<0.5	<0.5	270	260
09...	--	--	<1	--	--	--	--	--	--	--	--
DEC											
08...	260	<50	--	1	1	50	51	<0.5	<0.5	300	300
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
12...	760	90	--	1	<1	60	49	<0.5	<0.5	160	160
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	180	<50	--	<1	<1	30	30	<0.5	<0.5	300	290
08...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
09...	400	270	--	1	<1	50	42	<0.5	<0.5	180	170
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	520	410	--	1	1	60	59	<1.0	<1	230	230
06...	--	--	--	--	--	--	--	--	--	--	--
06...	480	320	--	<1	<1	60	57	<1.0	<1	230	230
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	450	190	--	1	1	50	48	<0.5	<0.5	360	350
12...	--	--	<1	--	--	--	--	--	--	--	--
JUN											
07...	3800	2100	--	2	1	100	84	4.0	5	190	190
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	130	120	--	3	2	50	52	<0.5	<0.5	310	320
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	2900	90	--	2	2	90	63	<0.5	<0.5	240	230
10...	--	--	1	--	--	--	--	--	--	--	--
SEP											
01...	4800	110	--	2	1	90	36	<0.5	<0.5	180	160
01...	7700	20	--	--	--	200	38	<10	<0.5	180	180

ILLINOIS RIVER BASIN

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT											
13	0.21	0.26	<5	<5	<5	<5	12	<5	540	100	<5
13	--	--	--	--	--	--	--	--	--	--	--
13	<0.1	0.23	8	<5	<5	<5	<5	<5	320	280	<5
13	--	--	--	--	--	--	--	--	--	--	--
NOV											
09	0.17	0.13	<5	<5	<5	<5	6	<5	1400	120	<5
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
08...	0.2	0.1	<5	<5	<5	<5	6	<5	360	140	10
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
12...	0.3	0.2	21	<5	<5	<5	<5	<5	1100	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	0.1	<0.1	<5	<5	<5	<5	<5	<5	140	<50	<5
08...	--	--	--	--	--	--	--	--	--	--	--
MAR											
09...	0.1	<0.1	7	<5	<5	<5	6	<5	440	270	<5
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	<0.1	<0.1	6	<5	<5	<5	<5	<5	270	63	<5
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.1	0.1	5	6	<5	<5	<5	<5	240	<50	<5
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	<0.1	<0.1	8	10	<5	7	5	7	430	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	0.2	<0.1	17	6	<5	<5	15	8	3300	<50	5
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	0.2	<0.1	<5	<5	<5	<5	<5	<5	<50	<50	8
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	0.3	0.1	11	9	6	7	16	6	4300	<50	7
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	0.4	0.2	<5	<5	<5	<5	13	<5	7200	59	13
01...	<1	<1	11	<5	--	<3	30	<10	10000	35	11

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)
OCT											
13...	<5	23	9	<0.05	<0.05	--	10	9	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
13...	<5	25	20	<0.05	<0.05	--	24	22	<1	<3	<3.0
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	<5	37	14	--	--	--	<5	<5	<1	<3	<3.0
09...	--	--	--	--	--	7	--	--	--	--	--
DEC											
08...	<5	22	16	--	--	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
12...	<5	45	17	--	--	--	6	<5	1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	<5	20	16	--	--	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	6	--	--	--	--	--
MAR											
09...	<5	36	--	--	--	--	6	<5	1	<3	<3.0
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	<5	28	22	<0.05	<0.05	--	7	<5	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<5	30	22	<0.05	<0.05	--	6	7	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	<5	48	21	<0.05	<0.05	--	9	--	<1	<3	--
12...	--	--	--	--	--	11	--	--	--	--	--
JUN											
07...	<5	120	29	--	--	--	<5	<5	<1	<3	<3.0
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	<5	28	29	--	--	--	<5	<5	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	<5	120	12	--	--	--	11	--	<1	<5	6.0
10...	--	--	--	--	--	6	--	--	--	--	--
SEP											
01...	<5	290	19	--	--	--	<5	<5	<1	<3	<3.0
01...	<10	280	19	0.10	<0.1	<10	12	<10	--	<1	<1.0

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
13...	870	870	<5	<5	760	<50	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	180	180	<5	<5	<100	<100	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	530	520	5	<5	110	<100	--	--	--	--	--
09...	--	--	--	--	--	--	2.9	1.1	12	1.9	7.8
DEC											
08...	530	520	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
12...	340	340	<5	<5	<50	<50	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	560	540	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	3.6	<0.4	12	<0.4	7.6
MAR											
09...	440	420	<5	<5	<50	<50	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	480	--	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	490	480	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	650	610	<5	--	<50	<50	--	--	--	--	--
12...	--	--	--	--	--	--	3.1	1.1	12	1.5	10
JUN											
07...	360	360	7	<5	<100	<100	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	630	630	<5	<5	<50	<50	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	470	450	10	7	<100	<100	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	310	280	7	<5	250	130	--	--	--	--	--
01...	--	280	--	<6	80	14	--	--	--	--	--

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
13...	--	7.7	--	--	<0.005	<0.005	<5	1	--	--	--
13...	--	--	5.0	0.6	--	--	--	--	20	4.4	98
13...	--	6.7	--	--	<0.005	<0.005	--	<1	--	--	--
13...	--	--	5.1	0.6	--	--	--	--	20	4.4	98
NOV											
09...	--	7.4	--	--	<0.005	<0.005	<5	1	--	--	--
09...	1.9	--	4.5	0.6	--	--	--	--	37	17	100
DEC											
08...	--	6.2	--	--	<0.005	<0.005	<5	1	--	--	--
08...	--	--	3.8	0.5	--	--	--	--	12	5.1	100
JAN											
12...	--	6.5	--	--	<0.005	<0.005	<5	2	--	--	--
12...	--	--	4.9	0.8	--	--	--	--	50	56	99
FEB											
08...	--	6.1	--	--	<0.005	<0.005	<5	1	--	--	--
08...	<0.4	--	4.8	0.3	--	--	--	--	80	0.0	92
MAR											
09...	--	6.1	--	--	<0.005	<0.005	5	1	--	--	--
09...	--	--	4.5	0.8	--	--	--	--	15	11	100
APR											
06...	--	5.9	--	--	<0.005	<0.005	<5	1	--	--	--
06...	--	--	4.3	0.5	--	--	--	--	6	3.6	100
06...	--	6.5	--	--	<0.005	<0.005	<5	1	--	--	-
06...	--	--	4.1	0.5	--	--	--	--	7	4.2	100
MAY											
12...	--	8.1	--	--	<0.005	<0.005	<5	<1	--	--	--
12...	1.2	--	6.2	0.7	--	--	--	--	18	5.5	98
JUN											
07...	--	7.5	--	--	<0.005	0.005	<5	2	--	--	--
07...	--	--	4.9	2.8	--	--	--	--	131	114	99
JUL											
12...	--	12	--	--	<0.005	0.005	5	--	--	--	--
12...	--	--	6.0	>5.0	--	--	--	--	173	141	100
AUG											
02...	--	--	5.7	3.8	--	--	--	--	151	93	100
10...	--	9.8	--	--	<0.005	<0.005	<5	--	--	--	--
10...	--	--	6.0	3.3	--	--	--	--	153	97	99
SEP											
01...	--	10	--	--	<0.005	<0.005	<5	--	--	--	--
01...	--	17	4.8	>5.0	<0.01	<0.010	--	--	341	430	99

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT											
13...	0845	81700	81700	1.00	1	110	10.0	1970	8.10	7.0	10.3
13...	0846	81700	81700	1.00	1	110	20.0	1970	8.10	7.0	10.4
13...	0847	81700	81700	1.00	1	110	30.0	1970	8.10	7.0	10.4
13...	0848	81700	81700	1.00	1	110	40.0	1980	8.10	7.0	10.5
13...	0849	81700	81700	1.00	1	110	50.0	1970	8.10	7.0	10.6
13...	0850	81700	81700	1.00	1	110	60.0	1980	8.10	7.0	10.6
13...	0851	81700	81700	1.00	1	110	70.0	1980	8.10	7.0	10.7
13...	0852	81700	81700	1.00	1	110	80.0	1980	8.10	7.0	10.7
13...	0853	81700	81700	1.00	1	110	90.0	1980	8.10	7.0	10.6
13...	0857	81700	81700	1.00	1	110	100	1980	8.10	7.0	10.7
NOV											
09...	0831	81700	81700	1.00	1	115	10.0	1330	--	8.0	10.3
09...	0832	81700	81700	1.00	1	115	20.0	1330	--	8.0	10.2
09...	0833	81700	81700	1.00	1	115	30.0	1340	--	8.0	10.3
09...	0834	81700	81700	1.00	1	115	40.0	1330	7.70	7.5	10.4
09...	0835	81700	81700	1.00	1	115	50.0	1340	7.70	7.5	10.4
09...	0836	81700	81700	1.00	1	115	60.0	1350	7.80	8.0	10.3
09...	0837	81700	81700	1.00	1	115	70.0	1350	7.80	8.0	10.3
09...	0838	81700	81700	1.00	1	115	80.0	1350	7.80	7.5	10.3
09...	0839	81700	81700	1.00	1	115	90.0	1350	7.80	7.5	10.3
09...	0840	81700	81700	1.00	1	115	100	1350	7.80	7.5	10.3
DEC											
08...	0832	81700	81700	0.20	1	115	10.0	1520	9.60	1.0	12.0
08...	0833	81700	81700	0.20	1	115	20.0	1510	9.70	1.0	12.0
08...	0834	81700	81700	0.30	1	115	30.0	1500	9.60	1.0	12.1
08...	0835	81700	81700	1.00	1	115	40.0	1520	9.60	1.0	12.2
08...	0836	81700	81700	1.00	1	115	50.0	1530	9.60	1.0	12.2
08...	0837	81700	81700	1.00	1	115	60.0	1540	9.70	1.0	12.2
08...	0838	81700	81700	0.70	1	115	70.0	1540	9.60	1.0	12.2
08...	0839	81700	81700	0.50	1	115	80.0	1540	9.70	1.0	12.2
08...	0840	81700	81700	0.30	1	115	90.0	1520	9.80	1.0	12.2
08...	0841	81700	81700	0.30	1	115	100	1510	9.80	1.0	12.1
08...	0842	81700	81700	0.20	1	115	110	1300	9.70	1.0	11.4
JAN											
12...	1405	81700	81700	1.00	1	120	10.0	1050	7.95	4.5	11.8
12...	1407	81700	81700	1.00	1	120	20.0	1070	7.85	4.5	12.3
12...	1409	81700	81700	1.00	1	120	30.0	1240	7.85	4.0	12.5
12...	1411	81700	81700	1.00	1	120	40.0	1250	7.84	4.0	11.8
12...	1413	81700	81700	1.00	1	120	50.0	1240	7.84	4.0	11.9
12...	1415	81700	81700	1.00	1	120	60.0	1240	7.85	4.0	12.3
12...	1417	81700	81700	1.00	1	120	70.0	1240	7.84	4.0	12.2
12...	1419	81700	81700	1.00	1	120	80.0	1240	7.85	4.0	12.3
12...	1421	81700	81700	1.00	1	120	90.0	1230	7.85	4.0	12.6
12...	1423	81700	81700	1.00	1	120	100	1230	7.85	4.0	12.6
12...	1425	81700	81700	1.00	1	120	110	1230	7.83	4.0	12.6
FEB											
08...	1145	81700	81700	1.50	1	120	45.0	1500	7.30	0.0	13.5
08...	1150	81700	81700	1.50	1	120	65.0	1500	7.30	0.0	13.5
08...	1155	81700	81700	1.50	1	120	85.0	1490	7.30	0.0	13.5
MAR											
09...	1224	81700	81700	0.67	1	113	100	1450	7.60	6.0	15.8
09...	1225	81700	81700	1.00	1	113	90.0	1570	7.80	6.0	16.1
09...	1226	81700	81700	1.00	1	113	80.0	1560	7.90	6.0	16.2
09...	1227	81700	81700	1.00	1	113	70.0	1580	7.80	5.5	16.3
09...	1228	81700	81700	1.00	1	113	60.0	1570	7.70	5.5	16.2
09...	1229	81700	81700	1.00	1	113	50.0	1560	7.70	5.5	16.2
09...	1230	81700	81700	1.00	1	113	40.0	1550	7.70	5.5	16.3
09...	1231	81700	81700	1.00	1	113	30.0	1540	7.70	5.5	16.3
09...	1232	81700	81700	1.00	1	113	20.0	1530	7.80	5.5	16.3
09...	1233	81700	81700	1.00	1	113	10.0	1520	7.80	5.5	16.1
APR											
06...	1152	81700	81700	1.00	1	119	107	--	9.20	9.0	15.1
06...	1153	81700	81700	1.00	1	119	97.0	1550	9.10	9.0	15.1
06...	1154	81700	81700	1.00	1	119	87.0	1560	9.10	9.0	15.1
06...	1155	81700	81700	1.00	1	119	77.0	1560	9.00	9.0	15.3
06...	1156	81700	81700	1.00	1	119	67.0	1550	9.00	9.0	15.4
06...	1157	81700	81700	1.00	1	119	57.0	1540	9.00	9.0	15.2
06...	1158	81700	81700	1.00	1	119	47.0	1530	9.00	9.0	15.2
06...	1159	81700	81700	1.00	1	119	37.0	1510	9.00	9.0	15.4
06...	1200	81700	81700	1.00	1	119	27.0	1510	9.00	9.0	15.1

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
MAY											
12...	1215	81700	81700	0.50	1	110	10.0	1700	8.90	14.0	14.4
12...	1216	81700	81700	0.50	1	110	20.0	1710	8.80	14.0	14.3
12...	1217	81700	81700	0.50	1	110	30.0	1710	8.90	14.0	14.1
12...	1218	81700	81700	0.50	1	110	40.0	1710	8.90	14.0	13.9
12...	1219	81700	81700	0.50	1	110	50.0	1720	8.90	14.5	13.7
12...	1220	81700	81700	0.50	1	110	60.0	1730	8.80	14.5	13.6
12...	1221	81700	81700	0.50	1	110	70.0	1740	8.90	14.5	13.6
12...	1222	81700	81700	0.50	1	110	80.0	1740	8.90	14.5	13.6
12...	1223	81700	81700	0.50	1	110	90.0	1740	8.90	14.5	13.4
12...	1224	81700	81700	0.50	1	110	100	1740	8.90	14.5	13.5
JUN											
07...	1130	81700	81700	1.00	1	115	105	1090	7.10	19.0	8.1
07...	1131	81700	81700	1.00	1	115	95.0	1170	7.50	21.0	7.5
07...	1132	81700	81700	1.00	1	115	85.0	1280	7.50	22.5	6.8
07...	1133	81700	81700	1.00	1	115	75.0	1280	7.60	22.5	6.9
07...	1134	81700	81700	1.00	1	115	65.0	1270	7.70	22.5	7.0
07...	1135	81700	81700	1.00	1	115	55.0	1260	7.70	22.0	7.0
07...	1136	81700	81700	1.00	1	115	45.0	1250	7.70	22.0	7.1
07...	1137	81700	81700	1.00	1	115	35.0	1230	7.70	22.0	7.0
07...	1138	81700	81700	1.00	1	115	25.0	1230	7.70	22.0	7.1
07...	1139	81700	81700	1.00	1	115	15.0	1230	7.70	22.0	7.0
07...	1140	81700	81700	1.00	1	115	5.00	1230	7.70	22.0	6.9
JUL											
12...	1305	81700	81700	1.00	1	115	5.00	1600	8.40	25.5	8.7
12...	1307	81700	81700	1.00	1	115	15.0	1610	8.50	25.5	8.9
12...	1308	81700	81700	1.00	1	115	25.0	1620	8.50	25.5	9.0
12...	1309	81700	81700	1.00	1	115	35.0	1630	8.50	25.5	9.0
12...	1310	81700	81700	1.00	1	115	45.0	1650	8.50	25.5	9.1
12...	1311	81700	81700	1.00	1	115	55.0	1660	8.50	25.5	9.1
12...	1312	81700	81700	1.00	1	115	65.0	1670	8.50	25.5	9.4
12...	1314	81700	81700	1.00	1	115	75.0	1670	8.50	25.5	9.3
12...	1315	81700	81700	1.00	1	115	85.0	1670	8.50	25.5	9.4
12...	1316	81700	81700	1.00	1	115	95.0	1670	8.50	25.5	9.3
12...	1317	81700	81700	1.00	1	115	105	1640	8.50	25.5	9.4
AUG											
02...	0900	81700	81700	1.00	1	120	10.0	1110	7.90	22.5	6.9
02...	0901	81700	81700	1.00	1	120	20.0	1110	7.80	22.5	6.8
02...	0902	81700	81700	1.00	1	120	30.0	1110	7.90	22.5	7.0
02...	0904	81700	81700	1.00	1	120	40.0	1110	7.90	22.5	7.0
02...	0905	81700	81700	1.00	1	120	50.0	1110	7.90	23.0	7.0
02...	0906	81700	81700	1.00	1	120	60.0	1120	7.90	23.0	7.0
02...	0907	81700	81700	1.00	1	120	70.0	1120	7.90	23.0	7.0
02...	0908	81700	81700	1.00	1	120	80.0	1120	7.90	23.0	7.0
02...	0909	81700	81700	1.00	1	120	90.0	1120	7.90	23.0	7.0
02...	0910	81700	81700	1.00	1	120	100	1130	7.90	23.0	7.0
02...	0911	81700	81700	1.00	1	120	110	1120	7.90	23.0	7.0
10...	0840	81700	81700	1.00	1	122	110	1240	7.70	21.5	6.9
10...	0841	81700	81700	1.00	1	122	100	1240	7.70	21.5	6.9
10...	0842	81700	81700	1.00	1	122	90.0	1240	7.80	21.5	6.9
10...	0843	81700	81700	1.00	1	122	80.0	1240	7.80	21.5	6.9
10...	0844	81700	81700	1.00	1	122	70.0	1240	7.80	21.0	7.0
10...	0845	81700	81700	1.00	1	122	60.0	1240	7.80	21.0	7.0
10...	0846	81700	81700	1.00	1	122	50.0	1240	7.80	21.0	7.0
10...	0847	81700	81700	1.00	1	122	40.0	1230	7.80	21.0	7.0
10...	0848	81700	81700	1.00	1	122	30.0	1230	7.80	21.0	6.9
10...	0849	81700	81700	1.00	1	122	20.0	1230	7.80	21.0	6.9
10...	0850	81700	81700	1.00	1	122	10.0	1230	7.80	21.0	6.8
SEP											
01...	0800	81700	81700	1.00	1	120	110	517	7.30	19.5	7.3
01...	0801	81700	81700	1.00	1	120	100	540	7.30	19.0	7.3
01...	0802	81700	81700	1.00	1	120	90.0	890	7.60	20.0	7.1
01...	0803	81700	81700	1.00	1	120	80.0	922	7.60	20.0	7.0
01...	0804	81700	81700	1.00	1	120	70.0	922	7.70	20.5	7.0
01...	0805	81700	81700	1.00	1	120	60.0	911	7.70	20.0	7.0
01...	0806	81700	81700	1.00	1	120	50.0	908	7.70	20.0	7.0
01...	0807	81700	81700	1.00	1	120	40.0	895	7.70	20.0	6.9
01...	0808	81700	81700	1.00	1	120	30.0	886	7.60	20.0	7.0
01...	0809	81700	81700	1.00	1	120	20.0	876	7.60	20.0	6.9
01...	0810	81700	81700	1.00	1	120	10.0	875	7.60	20.0	6.9

05542000 MAZON RIVER NEAR COAL CITY, IL

LOCATION.--Lat 41°17'10", long 88°21'35", in SW1/4SW1/4 sec.31, T.33 N., R.8 E., Grundy County, Hydrologic Unit 07120005, on right bank at downstream side of bridge on State Highway 113, 0.2 mi downstream from Johnny Run, 4 mi west of Coal City, and at mile 15.0.

DRAINAGE AREA.--455 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.
REVISED RECORDS.--WSP 1035: 1943(P). WSP 1115: 1946. WDR IL-75-1: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 527.41 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 30, 1940, nonrecording gage at same site and datum.
REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.
AVERAGE DISCHARGE.--50 years, 336 ft^3/s, 10.03 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft^3/s, Dec. 4, 1982, gage height, 19.51 ft; maximum gage height, 19.70 ft, July 15, 1958; no flow at times in many years.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1924, reached a stage of about 21 ft, discharge not determined.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 23	0115	5,190	9.49	Sept. 7	1615	8,590	12.82
Sept. 2	1130	*11,400	*15.17	Sept. 9	2000	9,210	13.35

Minimum daily discharge, 0.20 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.20	3.0	9.2	66	64	e24	136	110	278	56	112	3260
2	e1.0	2.8	7.8	52	61	e26	126	101	698	39	86	10400
3	e1.7	2.6	7.4	39	47	31	207	102	531	34	67	4970
4	e1.7	3.7	7.0	43	40	101	627	97	407	63	53	2060
5	e1.7	4.7	6.6	27	e31	865	585	130	314	60	43	1330
6	e1.6	5.1	6.0	45	e23	847	402	116	253	34	34	2840
7	e1.6	5.9	5.7	98	e17	509	321	91	210	21	26	7630
8	e1.6	4.8	5.6	236	e18	e350	279	82	183	15	22	6550
9	e1.6	4.6	5.2	445	e21	e260	254	86	161	11	18	8500
10	e1.6	7.7	4.8	282	e19	e230	221	88	139	8.6	15	7410
11	e1.6	29	4.4	205	e17	e210	196	76	119	7.9	12	3300
12	e1.6	19	4.1	151	e19	e190	187	66	136	43	10	2120
13	e1.6	24	3.9	130	e18	e170	169	66	181	92	8.8	1940
14	e1.6	22	e3.6	98	e20	e160	152	69	160	73	8.1	2460
15	e1.6	17	e3.3	82	e21	e150	155	68	130	44	8.0	1980
16	e1.7	28	e3.1	92	e24	e145	140	64	108	27	9.6	1500
17	2.5	46	e3.0	61	e26	e140	133	64	91	21	31	1150
18	3.1	40	2.8	60	e25	e140	125	54	79	20	23	912
19	3.2	30	2.8	59	e23	e130	112	57	70	1740	17	745
20	4.3	26	2.9	53	e21	e130	102	134	62	2420	11	622
21	4.8	21	3.1	90	e22	e130	98	249	56	2190	8.6	528
22	4.2	19	3.5	61	e26	e125	99	201	51	3330	7.6	473
23	3.7	15	7.9	41	e24	126	94	171	46	3150	316	399
24	3.5	12	76	43	e23	123	89	153	44	1170	396	316
25	3.4	10	105	42	e22	123	88	149	100	786	259	292
26	4.2	11	64	43	e21	118	91	144	88	548	173	276
27	4.3	11	57	44	e21	106	107	122	60	568	116	232
28	3.8	11	100	61	e22	114	110	99	90	450	101	209
29	3.3	10	168	64	---	150	135	106	169	279	70	207
30	3.0	10	122	62	---	183	138	133	99	196	52	194
31	3.0	---	88	64	---	159	---	139	---	147	66	---
TOTAL	78.30	455.9	893.8	2939	736	6265	5678	3387	5113	17643.5	2179.7	74805
MEAN	2.53	15.2	28.8	94.8	26.3	202	189	109	170	569	70.3	2493
MAX	4.8	46	168	445	64	865	627	249	698	3330	396	10400
MIN	.20	2.6	2.8	27	17	24	88	54	44	7.9	7.6	194
CFSM	.01	.03	.06	.21	.06	.44	.42	.24	.37	1.25	.15	5.48
IN.	.01	.04	.07	.24	.06	.51	.46	.28	.42	1.44	.18	6.12

CAL YR 1988 TOTAL 50479.47 MEAN 138 MAX 2620 MIN .03 CFSM .30 IN. 4.13
WTR YR 1989 TOTAL 120174.20 MEAN 329 MAX 10400 MIN .20 CFSM .72 IN. 9.83

e Estimated

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 26...	1000	17002	17002	4.2	1190	7.00	6.0	2.6	10.9	23	320	380
DEC 13...	1030	17002	17002	3.9	1170	8.10	1.0	1.1	14.9	26	K44	440
JAN 25...	1300	17002	17002	45	806	7.40	1.0	2.5	12.7	5	K6	340
FEB 22...	0930	17002	17002	26	1020	8.60	1.0	2.0	11.5	12	K36	460
APR 10...	1715	17002	17002	223	783	8.20	6.5	4.1	13.6	6	--	360
MAY 09...	1750	17002	17002	83	768	8.40	15.0	2.4	12.9	8	K40	370
JUN 08...	1310	17002	17002	183	848	8.10	23.0	1.7	9.3	10	--	430
JUL 13...	1630	17002	17002	107	670	7.90	26.5	13	9.3	25	--	280

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 26...	190	59	59	57	57	130	130	8.5	8.4	196	230	--
DEC 13...	200	95	91	54	51	77	73	6.1	5.8	236	210	--
JAN 25...	160	75	75	38	37	28	29	1.8	1.8	176	130	--
FEB 22...	250	110	98	61	53	49	42	4.1	3.6	216	160	--
APR 10...	--	81	82	39	--	14	15	0.5	0.30	176	92	40
MAY 09...	190	76	74	45	44	18	18	1.2	0.73	172	100	48
JUN 08...	230	94	93	48	48	14	14	0.6	1.2	196	93	42
JUL 13...	120	54	53	36	35	32	32	2.5	2.6	160	99	48

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	FLUORIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)
OCT 26...	--	--	1	1	<0.100	0.040	<0.001	--	--	--	0.050	--
DEC 13...	--	--	1	1	3.70	0.030	<0.001	--	--	--	0.080	0.080
JAN 25...	--	--	<1	<1	13.0	0.020	<0.001	--	--	--	0.080	0.070
FEB 22...	--	--	1	1	14.0	0.210	0.008	--	--	--	0.190	0.160
APR 10...	0.4	--	7	--	22.0	0.020	<0.001	0.38	0.40	22	0.020	0.010
MAY 09...	0.2	394	6	--	18.0	0.030	0.002	0.67	0.70	19	0.030	0.020
JUN 08...	0.3	409	13	--	25.0	0.080	0.005	0.62	0.70	26	0.060	0.040
JUL 13...	0.3	366	22	--	4.30	0.040	0.002	0.96	1.0	5.3	0.170	0.110

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)
OCT 26...	240	210	--	50	52	<0.5	<0.5	460	440	<3	<3	76
DEC 13...	60	<50	--	20	23	<0.5	<0.5	290	280	<3	<3	27
JAN 25...	110	60	--	30	--	<0.5	<0.5	120	120	<3	<3	<5
FEB 22...	130	110	--	50	39	<0.5	<0.5	170	150	<3	3	<5
APR 10...	620	590	<1	40	34	<0.5	<0.5	70	--	<3	<3	<5
MAY 09...	760	700	<1	30	30	<1.0	<1	90	100	<3	<3	<5
JUN 08...	570	330	<1	50	49	<0.5	<0.5	120	100	<3	<3	5
JUL 13...	460	60	2	40	37	<0.5	<0.5	170	170	<3	<3	<5

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
OCT 26...	9	<5	<5	8	5	420	160	<5	<5	28	16	<0.05
DEC 13...	<5	<5	<5	<5	<5	150	<50	<5	<5	8	<5	<0.05
JAN 25...	<5	<5	<5	<5	<5	120	<50	<5	<5	6	<5	<0.05
FEB 22...	7	<5	--	<5	--	<50	<50	<5	<5	6	<5	<0.05
APR 10...	<5	<5	<5	<5	<5	<50	<50	<5	<5	7	<5	<0.05
MAY 09...	5	<5	<5	<5	<5	130	<50	<5	<5	10	<5	<0.05
JUN 08...	<5	<5	<5	<5	<5	430	<50	<5	<5	9	<5	<0.05
JUL 13...	<5	<5	<5	<5	<5	630	<50	<5	<5	62	14	<0.05

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)
OCT 26...	21	7	<3	<3.0	360	360	<5	<5	<100	<100	--	--
DEC 13...	<5	<5	<3	<3.0	480	460	<5	<5	<50	<50	--	--
JAN 25...	<5	<5	<3	<3.0	250	260	<5	<5	<50	<50	--	--
FEB 22...	<5	--	<3	--	370	310	<5	--	<50	<50	--	--
APR 10...	<5	<5	<3	<3.0	190	--	<5	<5	<50	<50	<0.005	5
MAY 09...	<5	<5	<3	<3.0	230	230	<5	<5	<50	<50	<0.005	6
JUN 08...	9	7	<3	<3.0	240	240	<5	<5	<50	<50	<0.005	3
JUL 13...	8	--	<3	<3.0	240	230	<5	<5	<50	<50	<0.005	4

05543500 ILLINOIS RIVER AT MARSEILLES, IL
(National stream-quality accounting network station)

LOCATION.--Lat 41°19'40", long 88°43'10", in SE1/4SW1/4 sec.13, T.33 N., R.4 E., La Salle County, Hydrologic Unit 07120005, on right bank 0.4 mi downstream from dam in Marseilles, 6.9 mi upstream from Fox River and at mile 246.5.

DRAINAGE AREA.--8,259 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1919 to current year. Prior to October 1939, published as "at Morris."

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 462.91 ft above National Geodetic Vertical Datum of 1929 (NGVD). October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi upstream, at datum 478.50 ft above NGVD. January 1935 to September 1939, water-stage recorder at site 300 ft downstream from site used 1919-35 and at that datum.

REMARKS.--Water-discharges records good. Figures of daily discharge include flow through navigation locks. Flow regulated by powerplants and navigation dam above station. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--70 years, 10,681 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94,100 ft^3/s, Dec. 4, 1982, gage height, 16.78 ft; minimum daily, 1,460 ft^3/s, Oct. 16, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 26.2 ft at Morris occurred in 1831, and a stage of 25.4 ft (ice jam) occurred at present site on Jan. 21, 1916.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,300 ft^3/s, June 2, gage height, 8.62 ft; minimum daily, 2,840 ft^3/s, Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3630	3640	6940	10600	8170	4980	8760	6960	22900	5530	8000	16900
2	4170	3470	7250	8940	7670	5150	8800	6870	38300	6020	7510	31500
3	5380	2890	6100	8140	8180	4960	8820	6580	36300	5940	6050	33700
4	3270	6210	6820	7490	7270	8330	12200	6240	30200	5390	10200	23600
5	3530	5840	7230	7630	6100	12700	15900	5650	23900	5880	13000	18300
6	3160	6780	6640	9080	5260	12900	15800	5560	18700	4730	10600	21100
7	2840	5630	5590	10000	4890	10700	14700	6170	17100	5520	10300	27400
8	3380	4450	5470	14900	5650	10700	13300	5570	15900	5150	8890	28100
9	3570	5750	5100	15500	5230	9240	12100	5270	13400	4620	7520	32700
10	3340	11500	4650	14100	5000	9200	11600	5180	12600	5070	7470	36200
11	3560	9990	4660	13300	4940	9470	10400	5240	11200	5720	7670	29900
12	3230	9310	4340	12300	5300	9590	9970	4970	11600	5670	6730	23900
13	3390	9490	4970	10900	5370	9330	9490	4470	11900	6100	6780	19800
14	3250	8680	5080	10200	4970	8840	8730	4860	11200	5890	6050	20500
15	2930	8590	4530	9230	6450	8610	8380	4830	10100	5080	5620	19100
16	3810	13800	3620	8840	5620	9610	8130	4480	9430	5300	5770	17800
17	4510	12800	4220	8460	6720	9990	7480	4020	9160	4720	5150	16200
18	9050	11200	4200	7760	5260	10100	7400	4980	8070	5800	5530	14600
19	6900	11700	4420	7720	5510	10500	7300	4730	7930	13500	4970	13000
20	5950	12200	4930	7760	5680	10300	7130	6530	7420	16100	5510	11900
21	4470	11400	4730	6910	5840	9770	6420	7930	6710	14600	5980	10600
22	5250	10500	5560	6620	5520	9460	6360	8650	6780	14900	6460	10400
23	5220	10500	8260	6310	5130	9100	6220	7740	6680	15300	5190	9920
24	5760	9620	8420	6520	4890	8530	5640	6400	6790	11600	6130	8970
25	5070	8910	10300	6960	5200	8160	5790	8720	6530	9140	5470	7840
26	5260	9220	9960	7510	5100	7720	6040	8190	6320	8860	5780	6570
27	4710	9380	11000	7570	5290	7080	5420	7670	6350	8070	5370	6230
28	4270	9480	12900	7740	4880	8330	6880	8020	7150	8540	6710	4610
29	4100	8070	11500	8460	---	9420	6780	10000	7060	7340	5340	6040
30	4350	7840	11400	8300	---	10500	7360	11600	6640	8060	5860	4790
31	4040	---	10200	8790	---	9280	---	12300	---	8580	5630	---
TOTAL	135350	258840	210990	284540	161090	282550	269300	206380	394320	242720	213240	532170
MEAN	4366	8628	6806	9179	5753	9115	8977	6657	13140	7830	6879	17740
MAX	9050	13800	12900	15500	8180	12900	15900	12300	38300	16100	13000	36200
MIN	2840	2890	3620	6310	4880	4960	5420	4020	6320	4620	4970	4610

CAL YR 1988 TOTAL 2849930 MEAN 7787 MAX 33600 MIN 2070
WTR YR 1989 TOTAL 3191490 MEAN 8744 MAX 38300 MIN 2840

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOCITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)
OCT												
11...	1300	81700	17002	11	600	E3.50	1.16	3230	681	7.80	13.0	15.5
11...	1301	81700	80020	11	600	E3.50	1.16	3230	679	8.15	13.0	--
NOV												
01...	1100	81700	17002	--	--	--	1.31	3730	713	8.10	9.0	8.0
01...	1115	81700	17002	--	--	--	--	3730	730	8.12	8.0	9.0
07...	1330	81700	17002	12	600	E2.50	2.00	5900	746	7.60	5.0	11.0
07...	1331	81700	80020	12	600	E2.50	2.00	5900	538	8.04	5.0	--
DEC												
06...	1100	81700	17002	11	590	E3.00	1.83	5240	788	8.90	9.5	4.5
06...	1101	81700	80020	11	590	E3.00	1.83	5240	760	8.30	9.5	--
JAN												
10...	1200	81700	17002	11	560	E2.25	3.51	12700	802	7.20	7.0	0.0
10...	1201	81700	80020	11	560	E2.25	3.51	12700	794	8.05	7.0	--
FEB												
06...	1130	81700	17002	3	655	E3.00	1.56	4400	823	7.60	-23.0	0.5
06...	1131	81700	80020	3	655	E3.00	1.56	4400	826	8.76	-23.0	--
28...	1145	81700	80020	--	--	--	1.45	4280	1110	8.10	-3.0	--
28...	1200	81700	17002	--	--	--	1.45	4280	1110	8.10	-3.0	2.5
MAR												
07...	1030	81700	17002	3	640	E3.50	2.93	9900	933	8.40	-5.0	1.5
07...	1031	81700	80020	3	640	E3.50	2.93	9900	970	8.41	-5.0	--
21...	1130	81700	17002	--	--	--	--	--	1020	7.92	5.0	5.5
21...	1145	81700	80020	--	--	--	2.88	9940	1020	7.90	5.0	--
APR												
04...	1000	17002	17002	10	620	--	3.14	10900	629	7.80	14.0	9.5
04...	1015	81700	17002	10	620	--	3.14	10900	888	8.20	10.0	9.5
04...	1016	81700	80020	10	620	--	3.14	10900	887	8.17	10.0	--
MAY												
10...	1100	81700	17002	10	600	E4.00	1.62	5180	864	8.10	21.0	14.0
10...	1101	81700	80020	10	600	E4.00	1.62	5180	861	8.46	21.0	--
JUN												
05...	1115	81700	17002	9	790	E6.00	5.66	23900	584	7.40	26.5	20.5
05...	1116	81700	80020	9	790	E6.00	5.66	23900	564	7.76	26.5	--
JUL												
10...	1130	81700	17002	10	650	E4.00	2.00	5900	763	7.60	34.0	31.5
10...	1131	81700	80020	10	650	E4.00	2.00	5900	733	8.14	34.0	--
10...	1145	81700	17002	10	650	E4.00	2.00	5900	763	7.60	34.0	31.5
10...	1146	81700	80020	10	650	E4.00	2.00	5900	751	8.22	34.0	--
31...	1015	81700	80020	10	608	E2.50	2.72	8960	744	8.06	22.0	--
AUG												
08...	1200	81700	17002	3	750	E4.00	2.59	8380	600	7.40	24.5	25.0
08...	1201	81700	80020	3	750	E4.00	2.59	8380	586	7.89	24.5	--
29...	1200	81700	17002	--	--	--	--	5340	696	7.60	29.0	28.0
29...	1215	81700	80020	--	--	--	2.30	5340	696	7.60	29.0	28.0
30...	1046	81700	80020	3	750	E4.00	2.57	8300	805	7.60	30.0	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)
OCT											
11...	6.9	9.6	26	--	--	230	93	3.0	57	57	21
11...	--	--	--	45	--	--	--	3.0	--	--	--
NOV											
01...	2.5	11.8	17	K40	--	260	110	--	67	68	23
01...	3.6	11.7	22	--	--	260	260	--	71	67	24
07...	9.1	10.0	15	--	--	240	86	7.0	65	62	22
07...	--	--	--	180	--	--	--	7.0	--	--	--
DEC											
06...	3.1	11.9	14	--	--	330	150	<0.1	88	85	29
06...	--	--	--	--	--	--	--	0	--	--	--
JAN											
10...	64	11.5	23	--	--	280	120	4.0	74	69	27
10...	--	--	--	--	--	--	--	4.0	--	--	--
FEB											
06...	4.2	13.7	12	--	--	330	100	0	83	83	29
06...	--	--	--	46	K16	--	--	0	--	--	--
28...	4.3	--	--	K1	--	320	140	--	--	81	--
28...	1.3	14.3	19	1	--	320	70	--	85	83	28
MAR											
07...	23	13.2	23	--	--	310	130	0	79	78	28
07...	--	--	--	210	260	--	--	0	--	--	--
21...	0.20	12.6	23	--	--	340	--	--	84	--	31
21...	5.5	--	--	31	--	320	150	--	--	78	--
APR											
04...	14	10.9	25	110	--	310	140	--	82	79	30
04...	16	10.2	23	90	--	320	140	2.0	81	80	29
04...	--	--	--	--	K180	--	--	2.0	--	--	--
MAY											
10...	15	10.6	24	--	--	340	150	0	84	84	31
10...	--	--	--	25	K21	--	--	0	--	--	--
JUN											
05...	90	8.3	54	--	--	230	110	9.0	64	59	24
05...	--	--	--	2400	2916	--	--	9.0	--	--	--
JUL											
10...	6.4	7.1	25	--	--	250	100	1.0	65	64	24
10...	--	--	--	K13	247	--	--	1.0	--	--	--
10...	6.4	7.1	22	--	--	260	110	1.0	65	64	24
10...	--	--	--	K14	K183	--	--	2.0	--	--	--
31...	--	--	--	--	--	--	--	4.0	--	--	--
AUG											
08...	16	7.2	22	--	--	190	67	11	49	47	18
08...	--	--	--	270	477	--	--	11	--	--	--
29...	4.4	7.3	17	--	--	240	100	--	60	59	23
29...	9.4	7.3	--	160	--	230	78	--	--	56	--
30...	--	--	--	K23	24	220	220	8.0	--	54	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
11...	21	59	60	4.5	4.6	--	--	--	--	136	76
11...	--	--	--	--	--	0	160	140	131	--	--
NOV											
01...	23	52	53	5.1	5.1	--	189	--	156	152	--
01...	23	55	55	4.8	4.7	--	--	--	--	--	--
07...	21	60	58	5.4	5.1	--	--	--	--	156	--
07...	--	--	--	--	--	0	190	150	156	--	--
DEC											
06...	28	42	40	4.0	3.8	--	--	--	--	177	--
06...	--	--	--	--	--	0	214	180	175	--	--
JAN											
10...	25	54	52	3.7	3.2	--	--	--	--	160	--
10...	--	--	--	--	--	0	195	160	160	--	--
FEB											
06...	29	50	51	3.6	3.6	--	--	--	--	224	--
06...	--	--	--	--	--	0	270	220	221	--	--
28...	29	--	110	--	4.6	--	310	--	253	186	--
28...	28	120	120	5.4	5.4	--	310	--	253	253	--
MAR											
07...	28	90	91	4.9	4.8	--	--	--	--	181	--
07...	--	--	--	--	--	0	220	180	180	--	--
21...	--	90	--	2.9	--	--	--	--	--	--	--
21...	30	--	84	--	4.2	--	--	--	171	172	--
APR											
04...	28	62	61	3.0	2.6	--	--	--	--	172	--
04...	29	60	60	2.5	2.3	--	--	--	--	184	--
04...	--	--	--	--	--	0	223	180	183	--	--
MAY											
10...	31	56	57	3.4	2.6	--	--	--	--	184	120
10...	--	--	--	--	--	0	226	180	185	--	--
JUN											
05...	21	25	25	6.2	3.2	--	--	--	--	127	64
05...	--	--	--	--	--	0	153	130	125	--	--
JUL											
10...	23	50	49	4.0	4.2	--	--	--	--	153	86
10...	--	--	--	--	--	0	187	150	153	--	--
10...	24	50	50	4.5	4.1	--	--	--	--	--	88
10...	--	--	--	--	--	0	199	160	163	--	--
31...	--	--	--	--	--	0	194	160	159	--	--
AUG											
08...	17	43	43	4.4	3.9	--	--	--	--	121	62
08...	--	--	--	--	--	0	148	120	121	--	--
29...	23	53	52	4.1	3.4	--	--	--	--	143	--
29...	21	--	52	--	4.8	--	--	--	143	149	--
30...	20	--	53	--	5.4	0	179	150	147	--	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT											
11...	76	75	0.9	0.73	--	--	400	393	17	4	--
11...	--	--	--	--	--	--	--	--	--	--	0.110
NOV											
01...	95	69	0.6	0.50	5.5	--	448	433	9	2	0.100
01...	100	70	0.5	--	--	--	449	343	12	2	--
07...	92	74	0.7	--	--	--	436	430	22	11	--
07...	--	--	--	--	--	0.16	--	--	--	--	0.110
DEC											
06...	130	63	0.4	--	--	--	518	479	24	6	--
06...	--	--	--	--	--	--	--	--	--	--	0.110
JAN											
10...	100	88	0.4	--	--	--	516	478	85	20	--
10...	--	--	--	--	--	--	--	--	--	--	0.270
FEB											
06...	130	82	0.5	--	--	--	554	549	8	4	--
06...	--	--	--	--	--	0.078	--	--	--	--	0.140
28...	120	170	--	0.60	5.2	--	667	656	--	--	0.100
28...	120	160	0.5	0.60	5.2	--	678	705	10	3	0.100
MAR											
07...	100	130	0.6	--	--	--	572	577	30	7	--
07...	--	--	--	--	--	--	--	--	--	--	0.070
21...	120	140	0.5	--	--	--	613	--	25	5	--
21...	110	140	--	0.40	5.3	--	593	583	--	--	0.080
APR											
04...	120	100	0.4	--	--	--	--	494	36	7	--
04...	120	100	0.4	--	--	--	532	530	36	8	--
04...	--	--	--	--	--	--	--	--	--	--	0.120
MAY											
10...	120	81	0.6	0.59	--	--	540	513	27	9	--
10...	--	--	--	--	--	0.13	--	--	--	--	0.150
JUN											
05...	65	45	0.3	0.31	--	--	384	332	256	42	--
05...	--	--	--	--	--	--	--	--	--	--	0.130
JUL											
10...	88	70	0.6	0.54	--	--	504	406	20	10	--
10...	--	--	--	--	--	--	--	--	--	--	0.130
10...	88	69	0.6	0.62	--	--	454	409	25	11	--
10...	--	--	--	--	--	--	--	--	--	--	0.130
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	63	63	0.5	0.43	--	--	414	321	37	10	--
08...	--	--	--	--	--	0.080	--	--	--	--	0.150
29...	94	69	0.4	--	--	--	434	398	28	5	--
29...	88	67	--	0.50	4.2	--	397	395	--	--	0.150
30...	82	65	--	0.50	3.7	--	402	298	--	--	0.190

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
11...	3.60	3.60	0.320	0.310	0.006	--	1.4	--	0.520	0.420	--
11...	--	3.70	--	0.280	--	0.52	1.1	0.80	0.500	0.450	0.400
NOV											
01...	4.60	4.20	0.360	0.300	0.008	--	1.3	--	0.450	0.340	0.300
01...	4.10	4.00	0.580	0.240	0.014	--	1.7	--	0.418	0.380	--
07...	5.00	5.00	0.340	0.340	0.003	--	1.3	--	0.570	0.500	--
07...	--	5.00	--	0.290	--	0.91	1.2	1.2	0.590	0.550	0.470
DEC											
06...	4.90	4.80	0.290	0.270	0.027	--	1.1	--	0.310	0.230	--
06...	--	5.30	--	0.300	--	1.0	1.4	1.3	0.300	0.240	0.230
JAN											
10...	7.90	7.90	0.670	0.650	<0.001	--	2.3	--	0.440	0.230	--
10...	--	7.30	--	0.650	--	1.2	2.5	1.9	0.260	0.230	0.210
FEB											
08...	7.30	7.20	0.720	0.730	0.003	--	1.8	--	0.440	0.380	--
08...	--	5.60	--	0.720	--	0.68	1.6	1.4	0.390	0.340	0.340
28...	--	5.00	0.880	0.860	--	--	3.4	--	0.500	0.410	0.320
28...	--	5.20	0.970	0.860	0.013	--	2.1	--	0.490	0.390	0.320
MAR											
07...	6.40	6.30	1.47	1.45	0.036	--	3.1	--	0.490	0.320	--
07...	--	7.20	--	1.50	--	0.60	3.0	2.1	0.550	0.400	0.300
21...	6.20	6.20	1.90	1.70	0.021	--	2.4	--	0.360	0.280	--
21...	--	5.70	1.40	1.40	--	--	2.8	--	0.380	0.280	0.230
APR											
04...	5.70	--	0.860	--	0.010	--	1.8	--	0.380	0.250	--
04...	5.60	5.60	0.850	0.830	0.025	--	1.7	--	0.380	0.250	--
04...	--	5.40	--	0.810	--	0.59	1.9	1.4	0.450	0.270	0.230
MAY											
10...	6.20	5.90	0.400	0.400	0.013	--	1.8	--	0.450	0.300	--
10...	--	5.80	--	0.340	--	0.86	1.7	1.2	0.430	0.310	0.260
JUN											
05...	7.90	7.90	0.240	0.230	0.003	--	2.3	--	0.550	0.130	--
05...	--	7.70	--	0.220	--	0.88	1.5	1.1	0.210	0.140	0.130
JUL											
10...	3.40	3.40	0.150	0.170	0.005	--	1.1	--	0.390	0.270	--
10...	--	3.40	--	0.110	--	0.59	0.80	0.70	0.290	0.230	0.240
10...	3.40	3.40	0.160	0.160	--	--	1.1	--	0.360	0.260	--
10...	--	3.40	--	0.110	--	0.49	0.80	0.60	0.300	0.260	0.240
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	2.20	2.20	0.310	0.300	0.005	--	1.2	--	0.430	0.280	--
08...	--	2.40	--	0.260	--	0.54	0.70	0.80	0.430	0.280	0.260
29...	2.50	2.50	0.230	0.220	0.007	--	0.40	--	0.380	0.310	--
29...	--	2.50	0.150	0.150	--	--	3.1	--	0.460	0.320	0.290
30...	--	2.80	0.210	0.210	--	0.69	1.3	0.90	0.480	0.360	0.340

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
11...	340	<50	--	2	2	20	19	<0.5	<0.5	180	--
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
01...	400	<130	--	1	2	30	28	<0.5	<0.5	170	170
01...	360	<50	--	1	1	30	30	<0.5	<0.5	170	170
07...	710	330	--	2	2	30	23	<0.5	<0.5	210	180
07...	--	--	2	--	--	--	--	--	--	--	--
DEC											
06...	380	<50	--	2	2	40	37	<0.5	<0.5	120	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	1900	<50	--	2	<1	50	30	<0.5	<0.5	100	100
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	410	70	--	1	<1	40	34	<0.5	<0.5	130	140
06...	--	--	1	--	--	--	--	--	--	--	--
28...	--	<10	--	--	1	--	34	--	<0.5	--	--
28...	330	<60	--	1	1	30	30	<0.5	<0.5	170	170
MAR											
07...	940	580	--	1	1	10	<5	<0.5	<0.5	140	--
07...	--	--	--	--	--	--	--	--	--	--	--
21...	590	--	--	1	--	40	--	<0.5	--	150	--
21...	--	<10	--	--	1	--	34	--	<0.5	--	--
APR											
04...	1100	140	--	1	--	50	37	<0.5	<0.5	130	130
04...	1100	140	--	--	2	50	38	<0.5	<0.5	130	130
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	670	210	--	2	1	40	39	<1.0	<0.5	160	150
10...	--	--	1	--	--	--	--	--	--	--	--
JUN											
05...	8100	260	--	4	2	100	43	<0.5	<0.5	100	90
05...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	590	140	--	2	2	40	32	<0.5	<0.5	140	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	560	120	--	2	2	40	32	<0.5	<0.5	140	140
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	660	110	--	2	2	40	27	<0.5	<0.5	130	130
08...	--	--	2	--	--	--	--	--	--	--	--
29...	450	60	--	2	2	30	30	<0.5	<0.5	140	140
29...	--	20	--	--	2	--	30	--	<0.5	--	--
30...	630	<10	--	--	--	<100	26	<10	<0.5	140	160

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT											
11...	0.32	0.18	26	9	<5	<5	8	<5	560	<50	<5
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
01...	<3	<3	14	<5	<5	<5	73	<5	630	77	8
01...	0.41	0.39	<5	<5	<5	<5	15	<5	540	<50	<5
07...	0.62	0.3	200	100	<5	<5	6	<5	980	200	10
07...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	0.4	0.2	12	<5	<5	<5	7	<5	750	870	<5
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	0.6	0.3	10	<5	<5	<5	7	<5	3200	210	7
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	0.6	0.2	8	7	<5	<5	6	<5	390	290	<5
06...	--	--	--	--	--	--	--	--	--	--	--
28...	--	<1	--	3	--	<3	--	4	--	9	--
28...	0.6	<0.2	15	<5	<5	<5	22	<5	530	<50	5
MAR											
07...	0.2	<0.01	<5	<5	<5	<5	<5	<5	1400	<50	7
07...	--	--	--	--	--	--	--	--	--	--	--
21...	1	--	8	--	<5	--	45	--	760	--	7
21...	--	<1	--	2	--	<3	--	<1	--	8	--
APR											
04...	<3	<3	10	<5	<5	<5	31	<5	1300	<50	11
04...	0.4	<0.1	10	<5	<5	<5	33	<5	1300	68	7
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	0.2	<0.1	<5	<5	<5	<5	<5	<5	720	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	0.7	<0.1	21	<5	<5	<5	19	<5	9700	<50	18
05...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	0.2	<0.1	<5	<5	<5	<5	<5	<5	720	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
10...	0.2	<0.1	25	10	<5	<5	6	<5	790	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	0.6	0.1	8	<5	<5	<5	5	<5	990	<50	8
08...	--	--	--	--	--	--	--	--	--	--	--
29...	3.2	0.2	<5	<5	<5	<5	6	<5	620	<50	7
29...	--	<1	--	1	--	<3	--	6	--	42	--
30...	<1	<1	5	<5	--	<3	10	<10	800	6	12

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT											
11...	<5	39	<5	<0.05	<0.05	--	18	15	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
01...	<5	33	13	<0.05	<0.1	<10	33	11	<1	<3	<3.0
01...	<5	43	15	--	--	--	6	7	1	<3	<3.0
07...	<5	44	23	--	<0.05	--	36	--	<1	<3	<3.0
07...	--	--	--	--	--	5	--	--	--	--	--
DEC											
06...	<5	51	25	--	--	--	14	9	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	<5	160	16	--	--	--	7	5	1	<3	<3.0
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	<5	53	27	--	--	--	12	11	1	<3	<3.0
06...	--	--	--	--	--	5	--	--	--	--	--
28...	<5	--	36	--	<0.1	<10	--	5	<1	--	<1.0
28...	<5	51	36	--	<0.1	<10	22	13	<1	<3	<3.0
MAR											
07...	<5	79	37	--	--	--	7	<5	1	<3	<3.0
07...	--	--	--	E0.05	E0.05	--	--	--	--	--	--
21...	--	61	--	--	--	--	9	--	--	<3	--
21...	<5	--	35	--	0.2	<10	--	<1	1	--	<1.0
APR											
04...	<5	88	32	<0.05	<0.05	--	13	10	--	<3	<3.0
04...	<5	88	28	--	--	--	8	8	<1	<3	<3.0
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	<5	50	<5	--	--	--	8	9	1	<3	<3.0
10...	--	--	--	--	--	6	--	--	--	--	--
JUN											
05...	<5	290	<5	--	--	--	28	7	<1	<3	<3.0
05...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	<5	56	6	--	--	--	15	13	<1	<3	<3.0
10...	--	--	--	--	--	--	--	--	--	--	--
10...	<5	60	<5	<0.05	<0.05	--	33	10	<1	<3	<3.0
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	<5	57	10	--	--	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	4	--	--	--	--	--
29...	<5	49	6	--	--	--	<5	<5	<1	<3	<3.0
29...	2	--	5	--	0.1	<10	--	7	<1	--	<1.0
30...	<10	50	5	<0.10	0.2	<10	10	<10	--	<1	2.0

ILLINOIS RIVER BASIN

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
11...	260	260	5	<5	<100	<100	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
01...	240	240	<5	<5	<100	<100	--	--	--	--	--
01...	230	230	<5	<5	<100	<100	--	--	--	--	--
07...	260	250	<5	<5	250	<50	--	--	--	--	--
07...	--	--	--	--	--	--	1.1	0.8	8.5	1.6	6.2
DEC											
06...	240	240	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	200	190	<5	<5	<100	<100	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	250	250	<5	<5	130	<50	--	--	--	--	--
06...	--	--	--	--	--	--	1.6	<0.4	6.9	0.8	4.9
28...	--	290	--	<6	--	33	--	--	--	--	--
28...	300	290	<5	<5	<100	<100	--	--	--	--	--
MAR											
07...	240	--	<5	<5	<50	<50	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
21...	300	--	<5	--	<100	--	--	--	--	--	--
21...	--	270	--	<6	--	21	--	--	--	--	--
APR											
04...	240	240	<5	<5	<100	<100	--	--	--	--	--
04...	240	240	<5	<5	<100	<100	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	270	--	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	1.3	0.9	7.3	1.2	5.8
JUN											
05...	160	150	15	<5	<100	<100	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	240	240	<5	<5	<100	<100	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	240	240	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	220	220	<5	<5	280	200	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
29...	240	230	<5	<5	170	--	--	--	--	--	--
29...	--	230	--	<6	--	42	--	--	--	--	--
30...	--	230	--	<6	40	15	--	--	--	--	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
11...	--	6.6	--	--	1.0	<0.005	4	<1	--	--	--
11...	--	--	4.3	1.8	--	--	--	--	16	140	100
NOV											
01...	--	8.3	--	--	--	<0.005	4	3	11	111	98
01...	--	--	--	--	<0.005	<0.005	<5	3	--	--	--
07...	--	7.1	--	--	1.0	<0.005	6	2	--	--	--
07...	1.6	--	4.1	0.9	--	--	--	--	24	382	100
DEC											
06...	--	7.4	--	--	<0.005	<0.005	<5	1	--	--	--
06...	--	--	5.2	0.5	--	--	--	--	21	297	100
JAN											
10...	--	8.4	--	--	7.0	0.010	4	2	--	--	--
10...	--	--	4.7	2.2	--	--	--	--	97	3330	99
FEB											
06...	--	6.8	--	--	7.0	0.007	4	<1	--	--	--
06...	0.7	--	5.8	0.4	--	--	--	--	90	1070	90
28...	--	--	--	--	--	--	--	--	12	139	93
28...	--	7.3	--	--	<0.005	<0.005	5	2	--	--	--
MAR											
07...	--	8.7	--	--	--	<0.005	5	1	--	--	--
07...	--	--	5.4	1.0	--	--	--	--	20	535	82
21...	--	7.9	--	--	<0.005	0.005	<5	<1	--	--	--
21...	--	--	--	--	--	--	--	--	24	644	96
APR											
04...	--	7.7	--	--	--	<0.005	2	3	--	--	--
04...	--	8.0	--	--	2.0	<0.005	3	3	--	--	--
04...	--	--	5.9	1.2	--	--	--	--	41	1210	98
MAY											
10...	--	7.7	--	--	2.0	<0.005	5	<1	--	--	--
10...	1.0	--	5.2	1.0	--	--	--	--	22	308	96
JUN											
05...	--	14	--	--	2.0	<0.005	4	1	--	--	--
05...	--	--	6.0	2.9	--	--	--	--	275	17700	99
JUL											
10...	--	7.5	--	--	<5.0	<0.005	5	--	--	--	--
10...	--	--	5.1	1.2	--	--	--	--	25	398	100
10...	--	7.0	--	--	2.0	<0.005	5	--	--	--	--
10...	--	--	5.2	1.1	--	--	--	--	24	382	100
31...	--	--	5.2	2.6	--	--	--	--	41	992	99
AUG											
08...	--	6.9	--	--	<5.0	<0.005	2	--	--	--	--
08...	--	--	4.9	1.6	--	--	--	--	37	837	98
29...	--	6.5	--	--	<0.005	0.010	<5	--	--	--	--
29...	--	--	--	--	--	--	--	--	27	389	98
30...	--	5.8	4.4	1.4	<0.01	0.010	--	--	34	762	100

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT											
11...	1235	81700	81700	1.00	1	600	550	685	8.30	16.0	10.6
11...	1245	81700	81700	1.00	1	600	500	683	8.00	16.0	10.1
11...	1250	81700	81700	1.00	1	600	450	684	7.90	16.0	9.8
11...	1252	81700	81700	1.00	1	600	400	682	7.90	16.0	9.7
11...	1255	81700	81700	1.00	1	600	350	681	7.90	16.0	9.6
11...	1259	81700	81700	1.00	1	600	300	681	7.80	15.5	9.6
11...	1302	81700	81700	1.00	1	600	250	681	7.80	16.0	9.6
11...	1305	81700	81700	1.00	1	600	200	681	7.80	16.0	9.6
11...	1309	81700	81700	1.00	1	600	150	681	7.80	16.0	9.6
11...	1312	81700	81700	1.00	1	600	100	680	7.80	16.0	9.6
11...	1315	81700	81700	1.00	1	600	50.0	680	7.80	16.0	9.6
NOV											
01...	1045	81700	81700	1.00	--	--	50.0	732	8.15	9.0	11.9
01...	1046	81700	81700	1.00	--	--	100	732	8.17	9.0	11.8
01...	1053	81700	81700	1.00	--	--	150	732	8.15	9.0	11.7
01...	1102	81700	81700	1.00	--	--	200	730	8.11	9.0	11.6
01...	1103	81700	81700	1.00	--	--	250	730	8.09	9.0	11.5
01...	1105	81700	81700	1.00	--	--	300	730	8.11	9.0	11.7
01...	1116	81700	81700	1.00	--	--	350	730	8.09	9.0	11.7
01...	1118	81700	81700	1.00	--	--	400	729	8.10	9.0	11.7
01...	1120	81700	81700	1.00	--	--	450	729	8.09	9.0	11.7
01...	1125	81700	81700	1.00	--	--	500	729	8.10	9.0	11.8
01...	1130	81700	81700	1.00	--	--	550	728	8.14	9.0	11.8
07...	1220	81700	81700	1.00	1	600	550	742	7.80	11.0	9.7
07...	1221	81700	81700	1.00	1	600	500	743	7.70	11.0	9.8
07...	1222	81700	81700	1.00	1	600	450	745	7.70	11.0	9.9
07...	1223	81700	81700	1.00	1	600	400	744	7.70	11.0	10.0
07...	1224	81700	81700	1.00	1	600	350	746	7.60	11.0	10.0
07...	1225	81700	81700	1.00	1	600	300	746	7.60	11.0	10.0
07...	1226	81700	81700	1.00	1	600	250	747	7.60	11.0	10.0
07...	1227	81700	81700	1.00	1	600	200	747	7.60	11.0	10.0
07...	1228	81700	81700	1.00	1	600	150	747	7.70	11.0	10.0
07...	1229	81700	81700	1.00	1	600	100	747	7.60	11.0	10.0
07...	1230	81700	81700	1.00	1	600	50.0	747	7.60	11.0	10.1
07...	1231	81700	81700	1.00	1	600	0.0	749	7.80	11.0	10.3
DEC											
06...	1040	81700	81700	1.00	1	590	50.0	788	8.50	4.5	11.9
06...	1045	81700	81700	1.00	1	590	100	788	8.60	4.5	11.9
06...	1050	81700	81700	1.00	1	590	150	788	8.80	4.5	11.9
06...	1053	81700	81700	1.00	1	590	200	788	8.80	4.5	12.0
06...	1055	81700	81700	1.00	1	590	250	789	8.80	4.5	12.0
06...	1058	81700	81700	1.00	1	590	300	788	8.80	4.5	12.0
06...	1102	81700	81700	1.00	1	590	350	788	8.90	4.5	11.9
06...	1104	81700	81700	1.00	1	590	400	789	8.70	4.5	12.0
06...	1106	81700	81700	1.00	1	590	450	790	8.80	4.5	11.9
06...	1109	81700	81700	1.00	1	590	500	792	8.90	4.5	11.9
06...	1110	81700	81700	1.00	1	590	550	792	8.90	4.5	11.9
JAN											
10...	1135	81700	81700	0.50	1	560	50.0	750	7.50	0.0	--
10...	1140	81700	81700	0.50	1	560	100	820	7.28	0.0	11.2
10...	1145	81700	81700	0.50	1	560	150	791	7.27	0.0	12.0
10...	1150	81700	81700	0.50	1	560	200	796	7.19	0.0	12.5
10...	1155	81700	81700	0.50	1	560	250	810	7.18	0.0	13.2
10...	1202	81700	81700	0.50	1	560	300	802	7.20	0.0	11.5
10...	1205	81700	81700	0.50	1	560	350	830	7.21	0.0	12.2
10...	1210	81700	81700	0.50	1	560	400	826	7.16	0.0	13.1
10...	1215	81700	81700	0.50	1	560	450	790	7.14	0.0	13.2
10...	1220	81700	81700	0.50	1	560	500	810	7.10	0.0	12.2
10...	1225	81700	81700	--	1	560	550	818	--	--	--
FEB											
06...	1120	81700	81700	1.00	1	655	165	846	7.80	1.0	13.9
06...	1125	81700	81700	1.00	1	655	305	823	7.60	0.5	13.7
06...	1129	81700	81700	1.00	1	655	530	841	7.40	0.5	13.8
28...	1201	81700	81700	1.00	--	--	54.0	1110	8.03	2.5	14.5
28...	1202	81700	81700	1.00	--	--	114	1110	8.09	2.5	14.3
28...	1203	81700	81700	1.00	--	--	174	1110	8.03	2.5	14.2
28...	1204	81700	81700	1.00	--	--	234	1110	8.06	2.5	14.2
28...	1205	81700	81700	1.00	--	--	294	1110	8.06	2.5	14.2
28...	1206	81700	81700	1.00	--	--	354	1100	8.04	2.5	14.2
28...	1207	81700	81700	1.00	--	--	414	1110	8.05	2.5	--
28...	1208	81700	81700	1.00	--	--	474	1110	8.02	2.5	14.1
28...	1209	81700	81700	1.00	--	--	534	1110	7.96	2.5	14.3
28...	1210	81700	81700	1.00	--	--	594	1110	8.06	3.0	14.7

ILLINOIS RIVER BASIN

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
MAR											
07...	1015	81700	81700	1.00	1	640	180	930	9.40	1.5	13.3
07...	1029	81700	81700	1.00	1	640	330	933	8.40	1.5	13.2
07...	1045	81700	81700	1.00	1	640	490	938	7.90	1.5	13.0
21...	1125	81700	81700	1.00	--	--	62.0	1030	8.04	5.5	12.7
21...	1126	81700	81700	1.00	--	--	122	1030	7.91	5.5	12.7
21...	1127	81700	81700	1.00	--	--	182	1030	7.97	5.5	12.6
21...	1128	81700	81700	1.00	--	--	242	1030	7.88	5.5	12.7
21...	1129	81700	81700	1.00	--	--	302	1030	7.95	5.5	12.7
21...	1131	81700	81700	1.00	--	--	362	1020	7.89	5.5	12.6
21...	1132	81700	81700	1.00	--	--	422	1020	7.92	5.5	12.6
21...	1133	81700	81700	1.00	--	--	482	1020	7.87	5.5	12.6
21...	1134	81700	81700	1.00	--	--	542	1020	7.94	5.5	12.6
21...	1135	81700	81700	1.00	--	--	602	1020	7.80	5.5	12.6
APR											
04...	0926	81700	81700	1.00	1	620	580	897	8.20	9.0	10.0
04...	0927	81700	81700	1.00	1	620	520	895	8.20	9.0	10.0
04...	0928	81700	81700	1.00	1	620	460	893	8.20	9.0	10.2
04...	0929	81700	81700	1.00	1	620	400	892	8.10	9.5	10.2
04...	0930	81700	81700	1.00	1	620	340	890	8.10	9.5	10.2
04...	0931	81700	81700	1.00	1	620	280	888	8.20	9.5	10.2
04...	0932	81700	81700	1.00	1	620	220	885	8.20	9.5	10.2
04...	0933	81700	81700	1.00	1	620	160	884	8.20	9.5	10.3
04...	0934	81700	81700	1.00	1	620	100	883	8.20	9.5	10.3
04...	0935	81700	81700	1.00	1	620	40.0	882	8.20	9.5	10.1
MAY											
10...	1055	81700	81700	1.00	1	600	30.0	863	8.10	14.5	11.0
10...	1057	81700	81700	1.00	1	600	90.0	863	8.10	14.0	10.8
10...	1058	81700	81700	1.00	1	600	150	862	8.10	14.0	10.8
10...	1103	81700	81700	1.00	1	600	210	863	8.10	14.0	10.8
10...	1107	81700	81700	1.00	1	600	270	863	8.10	14.0	10.7
10...	1112	81700	81700	1.00	1	600	330	864	8.10	14.0	10.6
10...	1114	81700	81700	1.00	1	600	390	865	8.10	14.0	10.6
10...	1119	81700	81700	1.00	1	600	450	868	8.10	14.0	10.8
10...	1122	81700	81700	1.00	1	600	510	874	8.10	14.0	10.8
10...	1125	81700	81700	1.00	1	600	570	882	8.10	14.0	10.8
JUN											
05...	1035	81700	81700	1.00	1	790	80.0	574	7.50	20.5	8.9
05...	1040	81700	81700	1.00	1	790	160	572	7.50	20.5	8.7
05...	1042	81700	81700	1.00	1	790	240	578	7.50	20.5	8.7
05...	1044	81700	81700	1.00	1	790	320	576	7.40	20.5	8.4
05...	1046	81700	81700	1.00	1	790	400	580	7.40	20.5	8.4
05...	1048	81700	81700	1.00	1	790	480	584	7.40	20.5	8.4
05...	1050	81700	81700	1.00	1	790	560	584	7.40	20.5	8.4
05...	1052	81700	81700	1.00	1	790	640	586	7.50	20.5	8.5
05...	1054	81700	81700	1.00	1	790	720	592	7.40	20.5	8.0
JUL											
10...	1100	81700	81700	1.00	1	650	30.0	755	7.60	31.5	6.5
10...	1105	81700	81700	1.00	1	650	90.0	756	7.60	31.5	6.8
10...	1110	81700	81700	1.00	1	650	150	757	7.60	31.0	7.0
10...	1115	81700	81700	1.00	1	650	210	757	7.60	31.0	7.1
10...	1118	81700	81700	1.00	1	650	270	757	7.60	31.0	7.1
10...	1122	81700	81700	1.00	1	650	330	752	7.60	31.5	7.0
10...	1125	81700	81700	1.00	1	650	390	750	7.60	31.5	7.2
10...	1127	81700	81700	1.00	1	650	450	751	7.70	31.5	7.2
10...	1135	81700	81700	1.00	1	650	510	759	7.60	31.0	6.9
10...	1138	81700	81700	1.00	1	650	570	761	7.60	31.0	6.7
31...	1016	81700	81700	1.00	1	608	50.0	750	7.50	27.0	6.3
31...	1017	81700	81700	1.00	1	608	110	749	7.60	27.5	6.5
31...	1019	81700	81700	1.00	1	608	170	748	7.60	27.5	6.6
31...	1021	81700	81700	1.00	1	608	230	747	7.60	27.5	6.6
31...	1023	81700	81700	1.00	1	608	290	746	7.60	27.5	6.6
31...	1025	81700	81700	1.00	1	608	350	746	7.60	27.5	6.7
31...	1027	81700	81700	1.00	1	608	410	745	7.60	27.5	6.6
31...	1030	81700	81700	1.00	1	608	470	744	7.60	27.5	6.6
31...	1032	81700	81700	1.00	1	608	530	745	7.60	27.5	6.4
31...	1034	81700	81700	1.00	1	608	585	745	7.60	27.5	5.9

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG											
08...	1045	81700	81700	1.00	1	750	150	603	7.40	25.0	7.2
08...	1100	81700	81700	1.00	1	750	350	600	7.40	25.0	7.3
08...	1105	81700	81700	1.00	1	750	550	592	7.40	24.5	7.5
29...	1201	81700	81700	1.00	--	--	38.0	703	7.60	28.0	7.7
29...	1205	81700	81700	1.00	--	--	98.0	700	7.60	28.0	7.3
29...	1209	81700	81700	1.00	--	--	158	698	7.60	28.0	7.4
29...	1213	81700	81700	1.00	--	--	218	696	7.60	28.0	7.4
29...	1216	81700	81700	1.00	--	--	278	696	7.60	28.0	7.3
29...	1220	81700	81700	1.00	--	--	338	695	7.60	28.0	7.3
29...	1222	81700	81700	1.00	--	--	398	694	7.60	28.0	7.3
29...	1225	81700	81700	1.00	--	--	458	692	7.60	28.0	7.4
29...	1228	81700	81700	1.00	--	--	518	693	7.60	28.0	7.2
29...	1231	81700	81700	1.00	--	--	578	692	7.60	28.0	6.6
30...	1032	81700	81700	1.00	1	750	200	700	7.50	27.5	6.8
30...	1033	81700	81700	1.00	1	750	375	699	7.50	27.5	7.2
30...	1034	81700	81700	1.00	1	750	550	694	7.60	27.0	7.3

05546500 FOX RIVER AT WILMOT, WI

LOCATION.--Lat 42°30'40", long 88°10'45", in SW1/4 sec.30, T.1 N., R.20 E., Kenosha County, Hydrologic Unit 07120006, on right bank 100 ft downstream from bridge on County Trunk Highway C, 300 ft upstream from Wilmot Dam, 1.0 mi north of Wisconsin-Illinois State line, and 6.0 mi upstream from Fox Chain of Lakes.

DRAINAGE AREA.--868 mi^2.

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1308: 1943(M), 1945(M). WDR WI-67-1: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 735.22 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1965, nonrecording gage and concrete dam.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Three 6-ft lift gates in Wilmot Dam were in operation during the year; discharge through gates computed by weir and orifice formulas and added to flow over dam. Gage-height telemeter and data-collection platform at station.

AVERAGE DISCHARGE.--50 years, 546 ft^3/s, 8.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft^3/s, Mar. 31, 1960, gage height, 9.25 ft, from graph based on gage readings; no flow part of day Oct. 26, 1945; minimum daily discharge, 35 ft^3/s, Sept. 9, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,850 ft^3/s, Sept. 3, gage height, 6.59 ft; minimum daily, 50 ft^3/s, July 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	171	574	343	544	e202	1160	514	215	112	873	845
2	352	168	522	320	513	190	1060	488	359	76	781	1570
3	430	167	508	284	315	188	975	445	371	63	640	1780
4	372	190	491	248	286	204	1020	413	362	63	872	1610
5	254	282	390	257	e280	240	1040	402	366	66	1010	1320
6	240	331	380	264	e270	268	997	336	344	63	908	1180
7	209	319	373	268	e260	271	897	355	315	56	807	1160
8	162	311	256	263	e260	259	748	344	293	50	683	1090
9	147	317	e230	279	e250	275	610	337	239	63	528	1070
10	149	444	e220	298	e250	408	466	334	222	70	554	1240
11	148	631	209	285	e250	827	410	371	202	98	532	1290
12	151	581	263	313	e240	1140	360	236	188	134	498	1200
13	139	581	262	335	e240	1230	382	256	193	138	484	1100
14	132	648	276	313	236	1290	370	245	201	131	433	1070
15	128	575	225	287	216	1210	370	228	203	112	368	1030
16	134	722	187	265	e210	1130	362	223	206	101	202	926
17	140	872	203	260	e210	1100	364	211	194	98	240	870
18	154	852	212	251	e210	974	392	205	178	94	243	812
19	164	787	219	252	e220	944	369	212	165	134	227	588
20	160	764	254	284	e220	956	313	232	159	346	214	402
21	165	694	275	263	e220	884	309	247	143	270	204	404
22	177	595	272	265	e210	831	334	233	134	374	202	400
23	195	427	287	283	e210	764	328	214	131	352	204	377
24	228	401	297	296	e210	727	316	194	120	334	218	319
25	284	404	280	322	e210	750	341	208	108	312	244	287
26	272	436	231	398	e210	780	385	198	108	286	257	241
27	239	530	245	484	e216	831	432	189	108	232	261	250
28	232	592	271	453	e223	981	504	177	84	374	276	226
29	183	625	295	422	---	1360	569	167	76	507	279	201
30	168	601	315	442	---	1480	543	172	112	602	254	193
31	168	---	335	475	---	1310	---	190	---	856	233	---
TOTAL	6318	15018	9357	9772	7189	24004	16726	8576	6099	6567	13729	25051
MEAN	204	501	302	315	257	774	558	277	203	212	443	835
MAX	430	872	574	484	544	1480	1160	514	371	856	1010	1780
MIN	128	167	187	248	210	188	309	167	76	50	202	193
CFSM	.23	.58	.35	.36	.30	.89	.64	.32	.23	.24	.51	.96
IN.	.27	.64	.40	.42	.31	1.03	.72	.37	.26	.28	.59	1.07

CAL YR 1988 TOTAL 169758 MEAN 464 MAX 2260 MIN 65 CFSM .53 IN. 7.28
WTR YR 1989 TOTAL 148406 MEAN 407 MAX 1780 MIN 50 CFSM .47 IN. 6.36

e Estimated

05546700 FOX RIVER NEAR CHANNEL LAKE, IL

LOCATION.--Lat 42°28'45", long 88°10'42", in SW1/4 sec.10, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, at bridge on State Highway 173, 1.3 mi west of Channel Lake, 3.4 mi upstream from Grass Lake, and at mile 113.6.

DRAINAGE AREA.--871 mi^2.

PERIOD OF RECORD.--Water years 1976 to current year. Additional chemical data for water years 1971-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 35.

REMARKS.--Water-discharge records from Fox River at Wilmot, Wisconsin (station 05546500) were used for this site.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 04...	1100	17002	17002	380	713	7.90	15.0	17	8.9	35	2500
NOV 17...	1030	17002	17002	877	833	7.50	5.5	32	9.9	45	K93
JAN 04...	1100	17002	17002	232	952	7.80	0.0	3.1	14.4	14	K60
FEB 10...	1030	17002	17002	326	923	7.70	0.0	2.0	10.4	25	330
APR 05...	1030	17002	17002	1040	706	8.50	8.5	12	9.5	38	K130
MAY 26...	1000	17002	17002	196	753	8.40	22.0	2.5	8.9	38	K10
JUN 23...	1100	17002	17002	131	762	8.30	25.5	15	9.3	41	K60
AUG 03...	1030	17002	17002	636	706	8.10	26.0	3.1	8.9	50	K120

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT 04...	310	100	65	61	38	37	39	39	3.6	3.3	204
NOV 17...	390	160	94	90	42	41	26	26	3.7	3.5	236
JAN 04...	400	110	87	85	45	44	52	51	2.8	2.6	284
FEB 10...	380	110	84	84	42	42	39	39	2.8	2.8	276
APR 05...	320	110	75	69	36	35	26	26	2.4	1.9	212
MAY 26...	320	93	61	59	42	43	39	40	3.4	1.7	232
JUN 23...	300	83	54	50	43	41	45	44	2.3	3.2	212
AUG 03...	310	90	70	66	34	34	28	28	4.0	2.7	216

05546700 FOX RIVER NEAR CHANNEL LAKE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 04...	65	68	0.3	397	43	18	1.40	0.030	<0.001	1.7	1.7
NOV 17...	110	57	0.2	472	50	14	5.40	0.170	<0.001	1.7	1.9
JAN 04...	83	98	0.3	535	3	2	3.00	0.200	0.001	0.70	0.90
FEB 10...	83	73	0.3	489	1	1	2.80	0.230	0.001	0.77	1.0
APR 05...	75	50	0.2	385	34	6	2.30	0.190	0.010	1.2	1.4
MAY 26...	67	76	0.2	426	38	15	0.100	0.230	0.025	1.7	1.9
JUN 23...	66	82	0.1	415	35	18	<0.100	0.080	0.009	1.9	2.0
AUG 03...	68	54	0.2	383	28	13	2.00	0.040	0.003	2.1	2.1

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)
OCT 04...	3.1	0.190	0.030	410	<50	2	50	41	<0.5	<0.5
NOV 17...	7.3	0.190	0.070	1200	180	1	50	42	<0.5	<0.5
JAN 04...	3.9	0.050	0.030	110	60	1	20	19	<0.5	<0.5
FEB 10...	3.8	0.050	0.030	90	50	<1	40	39	<0.5	<0.5
APR 05...	3.7	0.100	0.040	720	260	1	40	37	<0.5	<0.5
MAY 26...	2.0	0.150	0.020	690	470	2	50	48	<0.5	<0.5
JUN 23...	--	0.180	0.030	390	140	2	50	43	<0.5	<0.5
AUG 03...	4.1	0.150	0.030	340	80	2	60	54	<0.5	<0.5

05546700 FOX RIVER NEAR CHANNEL LAKE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT										
04...	<50	50	<3	<3	<5	<5	<5	<5	<5	<5
NOV										
17...	<50	<50	<3	<3	9	<5	<5	<5	<5	<5
JAN										
04...	60	60	<3	<3	<5	<5	<5	<5	<5	<5
FEB										
10...	<50	<50	<3	<3	<5	<5	<5	<5	<5	<5
APR										
05...	<50	<50	<3	<3	<5	<5	<5	<5	<5	--
MAY										
26...	--	--	<3	<3	6	<5	<5	<5	<5	<5
JUN										
23...	70	70	<3	<3	<5	<5	<5	<5	<5	<5
AUG										
03...	<50	<50	<3	<3	<5	<5	<5	<5	<5	<5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT										
04...	750	64	<5	<5	91	6	<0.05	<5	<5	<3
NOV										
17...	1400	<50	<5	<5	68	6	<0.05	6	<5	<3
JAN										
04...	170	<50	<5	<5	15	9	0.11	<5	<5	<3
FEB										
10...	150	51	<5	<5	17	14	<0.05	<5	<5	<3
APR										
05...	820	64	<5	<5	58	19	<0.05	<5	--	<3
MAY										
26...	460	<50	<5	<5	81	<5	<0.05	6	<5	<3
JUN										
23...	500	<50	<5	<5	130	<5	<0.05	8	<5	<5
AUG										
03...	540	<50	<5	<5	77	12	<0.05	<50	<50	<3

05546700 FOX RIVER NEAR CHANNEL LAKE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT										
04...	<3.0	1500	1400	<5	<5	<50	<50	<0.005	4	1
NOV										
17...	<3.0	1100	1000	<5	<5	<50	<50	<0.005	6	1
JAN										
04...	<3.0	1500	1500	<5	<5	<50	<50	<0.005	3	<1
FEB										
10...	<3.0	1400	--	<5	<5	<50	<50	<0.005	4	<1
APR										
05...	<3.0	720	680	<5	<5	<50	--	<0.005	3	<1
MAY										
26...	<3.0	1100	--	<5	<5	<50	<50	<0.005	6	<1
JUN										
23...	<3.0	1400	1300	7	6	<50	<50	<0.005	5	1
AUG										
03...	<3.0	1000	1000	<5	<5	<100	<50	<0.005	3	--

05547000 CHANNEL LAKE NEAR ANTIOCH, IL

LOCATION.--Lat 42°28'20", long 88°08'50", in NW1/4NE1/4 sec.14, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on right bank 30 ft downstream from bridge on State Highway 173, at dredged channel outlet of Channel Lake, 0.8 mi southwest of natural outlet, and 3 mi west of Antioch.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.21 ft higher.

REMARKS.--Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.29 ft, present datum, Apr. 6, 1960; minimum, 1.65 ft, Jan. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.86 ft, Sept. 4; minimum, 2.13 ft (estimated), Mar. 5.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.02	e3.32	e2.82	2.64	e2.82	e2.19	3.23	4.10	e4.27	3.98	4.41	4.44
2	e4.04	e3.20	e2.77	2.63	e2.81	e2.17	3.24	4.09	e4.30	3.97	4.45	4.58
3	e4.06	3.11	e2.72	2.63	e2.77	e2.15	3.19	4.10	e4.32	3.96	4.49	4.72
4	e4.08	3.08	e2.70	2.62	e2.70	e2.14	3.22	4.15	e4.33	3.90	4.61	4.82
5	e4.03	3.06	e2.69	2.62	e2.65	e2.13	3.12	4.17	e4.32	3.89	4.70	4.80
6	e4.01	3.05	e2.67	2.61	e2.59	e2.15	e3.10	4.03	e4.33	3.90	4.61	4.78
7	e4.00	e2.99	e2.63	2.61	e2.58	e2.16	e3.05	4.01	e4.31	3.87	4.55	4.71
8	e3.97	e2.90	e2.60	2.61	e2.57	e2.20	e3.02	e3.99	e4.29	3.85	4.51	4.63
9	e3.95	e2.80	e2.58	2.60	e2.57	e2.25	e2.99	e3.98	e4.28	3.91	4.46	4.53
10	e3.97	e2.85	e2.52	2.60	e2.56	e2.30	e2.96	e3.96	e4.21	3.90	4.44	4.41
11	e3.91	e2.80	e2.48	2.59	e2.56	e2.72	e2.91	e3.93	e4.19	3.83	4.42	4.39
12	e3.87	e2.74	e2.45	2.59	e2.56	e2.90	e2.92	e3.91	e4.19	3.83	4.42	4.33
13	e3.83	e2.78	e2.40	e2.61	e2.56	e3.05	e2.94	e3.89	e4.19	3.82	4.46	4.31
14	3.84	e2.75	e2.36	e2.64	e2.56	e3.12	3.04	e3.88	e4.17	3.84	4.45	4.26
15	3.81	e2.74	e2.31	e2.67	e2.56	e3.18	3.03	e3.88	e4.17	3.86	4.40	4.24
16	3.81	e3.00	e2.25	e2.69	e2.50	e3.22	3.22	e3.87	e4.16	3.87	4.36	4.23
17	e3.78	e2.98	e2.21	e2.70	e2.45	e3.23	3.27	e3.86	e4.14	3.88	4.30	4.22
18	e3.82	e2.93	e2.19	e2.71	e2.40	e3.23	3.39	e3.88	e4.11	3.91	4.27	4.19
19	e3.80	e2.87	e2.20	e2.73	e2.37	e3.21	3.51	e3.92	e4.09	3.89	4.27	4.15
20	e3.73	e2.86	e2.21	e2.75	e2.33	e3.18	3.66	e3.99	e4.08	3.88	4.27	4.11
21	e3.70	e2.84	e2.24	e2.77	e2.31	e3.16	3.66	e3.99	4.07	3.97	4.21	4.06
22	e3.63	2.84	e2.28	e2.78	e2.30	e3.11	3.77	e3.99	4.08	4.03	4.23	3.98
23	e3.64	e2.78	e2.32	e2.79	2.27	e3.08	3.86	e4.01	4.10	4.06	4.15	3.90
24	e3.62	e2.77	e2.37	e2.79	2.27	e3.06	3.95	e4.06	4.06	4.08	4.12	3.98
25	e3.54	e2.76	e2.41	e2.78	2.26	e3.03	4.05	e4.12	4.05	4.10	4.14	3.97
26	e3.55	e2.79	e2.46	e2.77	2.26	e3.01	4.07	e4.14	4.06	4.12	4.16	3.90
27	3.55	e2.80	e2.51	e2.77	e2.23	e3.02	4.08	e4.09	4.05	4.15	4.18	3.95
28	e3.55	e2.80	e2.56	e2.78	e2.20	e3.05	4.10	e4.10	3.99	4.11	4.28	4.01
29	e3.41	e2.77	e2.58	e2.80	---	e3.09	4.15	e4.11	3.98	4.20	4.33	3.97
30	e3.38	e2.79	e2.62	e2.81	---	e3.13	4.15	e4.18	3.99	4.30	4.29	3.97
31	3.36	---	2.64	e2.82	---	e3.21	---	e4.22	---	4.36	4.30	---
MEAN	3.78	2.89	2.48	2.69	2.48	2.80	3.43	4.02	4.16	3.97	4.36	4.28
MAX	4.08	3.32	2.82	2.82	2.82	3.23	4.15	4.22	4.33	4.36	4.70	4.82
MIN	3.36	2.74	2.19	2.59	2.20	2.13	2.91	3.86	3.98	3.82	4.12	3.90

CAL YR 1988 MEAN 3.66 MAX 5.20 MIN 2.19
WTR YR 1989 MEAN 3.45 MAX 4.82 MIN 2.13

e Estimated

05547500 FOX LAKE NEAR LAKE VILLA, IL

LOCATION.--Lat 42°25'10", long 88°07'35", in SE1/4SE1/4 sec.36, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Columbia Bay of Fox Lake, 2.5 mi west of Lake Villa.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 15, 1939, nonrecording gage at same site at datum 2.26 ft higher. Dec. 15, 1939, to Sept. 30, 1971, at datum 2.28 ft higher.

REMARKS.--Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.18 ft, present datum, Apr. 6, 1960; minimum, 1.83 ft, present datum, Jan. 11-14, 16-18, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.78 ft, Sept. 4-6; minimum, 1.94, Dec. 19, 20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.00	3.27	2.55	2.48	e2.77	e2.10	3.20	4.10	4.23	3.93	4.40	4.44
2	4.02	3.18	2.50	2.48	e2.74	e2.09	3.19	4.09	4.26	3.93	4.43	4.56
3	4.04	3.10	2.50	2.48	e2.65	e2.09	3.16	4.08	4.28	3.92	4.43	4.69
4	4.06	3.08	2.48	2.48	e2.56	e2.08	3.17	4.04	4.32	3.90	4.58	4.77
5	4.02	3.06	2.46	2.48	e2.55	e2.09	3.13	4.12	4.31	3.87	4.68	4.77
6	3.99	3.03	2.43	2.49	e2.53	e2.15	3.07	4.03	4.32	3.87	4.63	4.75
7	3.98	2.88	2.42	2.48	e2.52	e2.11	3.02	4.00	4.30	3.84	4.55	4.69
8	3.95	2.80	2.39	2.48	e2.51	e2.11	2.99	3.97	4.28	3.82	4.50	4.62
9	3.93	2.71	2.33	2.48	e2.50	e2.18	2.96	3.94	4.27	3.85	4.45	4.51
10	3.95	2.78	2.32	2.48	e2.50	e2.25	2.84	3.93	4.20	3.86	4.42	4.41
11	3.89	2.70	2.28	2.48	e2.50	e2.63	2.81	3.91	4.16	3.82	4.41	4.38
12	3.85	2.67	2.25	2.50	e2.50	e2.78	2.82	3.89	4.17	3.83	4.41	4.35
13	3.82	2.72	2.23	2.52	e2.50	e2.92	2.84	3.86	4.18	3.83	4.44	4.33
14	3.80	2.66	2.24	2.54	e2.48	e3.04	2.93	3.86	4.15	3.82	4.42	4.29
15	3.78	2.60	2.24	2.56	e2.45	e3.14	3.01	3.87	4.14	3.83	4.40	4.25
16	3.77	2.94	2.18	2.59	e2.42	e3.18	3.14	3.86	4.13	3.85	4.37	4.22
17	3.76	2.85	2.09	2.62	e2.39	e3.19	3.27	3.84	4.12	3.84	4.31	4.21
18	3.80	2.77	2.01	2.64	e2.36	e3.20	3.38	3.85	4.09	3.85	4.27	4.17
19	3.76	2.79	1.95	2.66	e2.33	e3.18	3.51	3.88	4.07	3.91	4.24	4.13
20	3.71	2.79	1.94	2.67	e2.31	3.16	3.62	3.96	4.04	3.96	4.26	4.10
21	3.68	2.72	1.98	2.68	e2.29	3.13	3.68	3.96	4.03	3.97	4.21	4.05
22	3.61	2.65	2.04	2.69	e2.26	3.08	3.77	3.96	4.04	4.01	4.20	4.05
23	3.61	2.58	2.11	2.69	e2.23	3.03	3.84	3.98	4.05	4.05	4.18	4.00
24	3.59	2.51	2.16	2.69	e2.22	2.97	3.92	3.97	4.03	4.07	4.15	3.95
25	3.52	2.47	2.20	2.69	e2.19	2.91	4.04	4.08	4.02	4.08	4.14	3.95
26	3.48	2.45	2.24	2.69	e2.17	2.86	4.07	4.12	4.02	4.10	4.16	3.93
27	3.47	2.64	2.33	2.69	e2.16	2.85	4.08	4.06	4.02	4.13	4.18	3.94
28	3.50	2.56	2.48	2.69	e2.12	2.92	4.09	4.03	3.99	4.13	4.26	3.97
29	3.39	2.53	2.49	2.69	---	2.99	4.14	4.07	3.95	4.17	4.33	3.97
30	3.33	2.58	2.49	2.69	---	3.12	4.15	4.11	3.94	4.30	4.30	3.97
31	3.31	---	2.49	e2.73	---	3.20	---	4.18	---	4.36	4.26	---
MEAN	3.75	2.77	2.28	2.59	2.42	2.73	3.39	3.99	4.14	3.96	4.35	4.28
MAX	4.06	3.27	2.55	2.73	2.77	3.20	4.15	4.18	4.32	4.36	4.68	4.77
MIN	3.31	2.45	1.94	2.48	2.12	2.08	2.81	3.84	3.94	3.82	4.14	3.93

CAL YR 1988 MEAN 3.58 MAX 5.11 MIN 1.94
WTR YR 1989 MEAN 3.39 MAX 4.77 MIN 1.94

e Estimated

ILLINOIS RIVER BASIN

05548000 NIPPERSINK LAKE AT FOX LAKE, IL

LOCATION.--Lat 42°24'10", long 88°10'55", in SE1/4SE1/4 sec.4, T.45 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Nippersink Lake 300 ft upstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge in village of Fox Lake, and at mile 106.4.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 16, 1939, nonrecording gage at same site at datum 2.13 ft higher. Dec. 16, 1939, to Sept. 30, 1971, at datum 2.13 ft higher.

REMARKS.--Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.12 ft, present datum, Apr. 5, 1960; minimum observed, 1.70 ft, Feb. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.71 ft, Sept. 4, 5; minimum, 1.90 ft (estimated), Dec. 20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.87	e3.25	2.41	2.08	e2.70	2.05	3.06	4.07	4.18	3.90	4.36	4.40
2	e3.94	e3.17	2.35	2.08	e2.58	2.02	3.05	4.04	4.18	3.90	4.36	4.51
3	e3.93	2.99	e2.29	2.08	e2.48	2.02	3.00	4.01	4.25	3.88	4.34	4.63
4	e3.96	2.97	e2.35	2.09	e2.45	2.02	2.99	3.98	4.27	3.88	4.49	4.70
5	e3.95	2.90	e2.32	2.09	e2.45	2.02	3.05	3.97	4.27	3.84	4.59	4.70
6	e3.92	2.80	e2.19	2.09	e2.43	e2.04	3.01	3.99	4.25	e3.85	4.58	4.66
7	e3.89	2.75	e2.30	2.09	e2.41	2.06	2.96	3.95	4.24	e3.85	4.50	4.61
8	e3.86	2.67	e2.23	2.10	e2.40	2.06	2.91	3.93	4.23	e3.82	4.42	4.53
9	e3.86	2.61	e2.18	2.10	e2.40	2.06	2.82	3.96	e4.22	3.78	4.39	4.44
10	e3.80	2.62	e2.30	2.10	e2.40	2.12	2.74	3.93	4.17	3.78	4.36	4.35
11	e3.84	2.58	e2.25	e2.15	e2.40	2.28	2.69	3.89	4.14	3.80	4.36	4.31
12	e3.81	2.56	e2.18	e2.18	e2.40	2.54	2.75	3.87	4.14	3.80	4.36	4.29
13	e3.77	2.53	e2.10	e2.20	e2.40	2.76	2.76	e3.86	4.14	3.81	4.38	4.27
14	e3.70	2.55	e2.17	e2.21	e2.38	2.91	2.80	3.83	4.13	3.79	4.35	4.25
15	e3.68	2.48	e2.24	e2.24	e2.35	3.03	2.96	3.82	4.11	3.79	4.36	4.19
16	e3.67	2.37	e2.18	e2.27	e2.34	3.06	3.05	e3.83	4.08	3.80	4.32	4.17
17	e3.73	2.58	e2.10	e2.30	e2.32	3.10	3.21	e3.83	4.05	e3.80	4.27	4.14
18	e3.75	2.68	e2.00	e2.32	e2.30	3.12	3.33	3.81	4.05	e3.83	4.23	4.11
19	e3.75	2.68	e1.92	e2.34	e2.27	3.10	3.45	3.84	4.05	3.91	4.19	4.07
20	e3.70	2.68	e1.90	e2.41	e2.26	3.10	3.53	3.90	e4.04	3.96	4.17	4.04
21	e3.64	2.60	e1.94	e2.39	e2.23	3.07	e3.70	3.91	e4.03	3.96	4.15	3.99
22	e3.58	2.52	2.10	e2.38	e2.19	3.02	e3.80	3.93	e4.03	3.98	4.11	3.99
23	e3.53	2.45	e2.02	e2.33	e2.16	2.96	e3.89	3.93	4.00	4.01	4.14	3.93
24	3.40	2.39	e2.00	e2.31	e2.12	2.90	e3.94	3.90	4.01	4.03	4.12	3.89
25	3.42	2.33	e2.00	e2.29	e2.09	2.84	e4.05	4.02	3.99	4.04	4.10	3.86
26	3.34	2.33	e2.06	e2.29	e2.07	2.77	4.04	4.02	e3.99	4.05	4.10	3.89
27	3.27	2.24	e2.02	e2.29	e2.06	2.73	4.06	4.02	4.00	4.06	4.12	3.88
28	3.26	2.35	2.02	e2.40	e2.05	2.78	4.10	3.99	3.99	4.12	4.21	3.88
29	3.27	2.39	2.07	e2.33	---	2.95	4.08	4.02	3.95	4.14	4.25	3.91
30	e3.29	2.41	2.08	e2.30	---	3.03	4.07	4.07	3.91	4.27	4.22	3.91
31	3.15	---	2.08	e2.50	---	3.07	---	4.11	---	4.33	4.18	---
MEAN	3.66	2.61	2.14	2.24	2.32	2.63	3.33	3.94	4.10	3.93	4.29	4.22
MAX	3.96	3.25	2.41	2.50	2.70	3.12	4.10	4.11	4.27	4.33	4.59	4.70
MIN	3.15	2.24	1.90	2.08	2.05	2.02	2.69	3.81	3.91	3.78	4.10	3.86

CAL YR 1988 MEAN 3.50 MAX 5.06 MIN 1.90
WTR YR 1989 MEAN 3.29 MAX 4.70 MIN 1.90

e Estimated

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL

LOCATION.--Lat 42°26'37", long 88°14'51", in NE1/4NW1/4 sec.25, T.46 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank at upstream side of bridge in Winn Road, 0.6 mi west of Spring Grove and at mile 7.4.

DRAINAGE AREA.--192 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

REVISED RECORDS.--WSP 2115: 1969-70(M). WDR IL-75-1: Drainage area. WDR IL-85-2: 1966-67(M), 1971.

GAGE.--Water-stage recorder. Datum of gage is 746.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--23 years, 156 ft^3/s, 11.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,910 ft^3/s, Sept. 26, 1986, gage height, 14.26 ft; minimum, 6.6 ft^3/s, Aug. 7, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1960 reached a stage of 13.7 ft, from information by local resident, and flood in July 1938 reached a stage of about 4 to 6 ft higher than that in April 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 11	1800	601	6.68	Sept. 2	0930	*603	*6.09

Minimum discharge, 9.8 ft^3/s, Mar. 1, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	31	e86	e54	80	37	139	93	118	22	85	411
2	41	23	e80	52	72	38	121	83	118	22	59	590
3	38	26	e75	53	64	47	127	78	105	21	49	522
4	32	50	e71	50	e45	92	123	61	133	18	150	397
5	27	81	e68	51	e41	114	103	62	119	16	283	267
6	25	71	e67	50	e50	102	93	47	98	13	298	225
7	25	59	e66	53	e62	89	85	47	79	14	218	197
8	25	53	e62	e60	e59	76	81	46	67	15	146	160
9	26	55	e53	e76	57	86	75	43	59	21	120	151
10	30	105	e50	70	56	244	66	40	58	26	106	161
11	23	100	e36	58	55	535	78	37	56	16	80	156
12	22	84	e53	65	53	527	66	36	64	15	63	127
13	22	99	e55	65	56	341	61	36	73	17	102	108
14	31	84	e58	55	56	230	65	38	64	14	104	137
15	29	74	e50	53	55	206	55	40	55	15	89	140
16	33	192	e41	48	51	168	59	41	52	18	67	123
17	28	145	e45	46	48	140	64	38	50	19	51	109
18	31	96	e46	44	47	120	60	38	47	18	42	100
19	33	96	49	46	49	105	65	44	42	38	36	93
20	29	94	59	49	49	103	66	49	39	58	38	77
21	37	88	54	48	49	95	60	52	35	58	26	67
22	31	85	49	56	43	87	57	53	31	53	26	65
23	35	76	55	55	44	83	57	47	31	45	23	55
24	44	73	55	53	43	80	53	46	27	37	26	63
25	37	68	49	54	44	83	102	92	25	33	25	60
26	33	e82	43	78	44	89	107	74	26	32	23	54
27	38	e120	45	81	40	112	89	53	27	37	24	52
28	46	e90	64	73	41	158	102	46	26	91	85	56
29	28	e80	e58	72	---	235	123	62	22	83	142	53
30	24	e92	e52	79	---	222	111	81	22	96	119	51
31	28	---	e57	82	---	180	---	102	---	111	100	---
TOTAL	951	2472	1751	1828	1453	4824	2513	1705	1768	1092	2805	4827
MEAN	30.7	82.4	56.5	59.0	51.9	156	83.8	55.0	58.9	35.2	90.5	161
MAX	46	192	86	82	80	535	139	102	133	111	298	590
MIN	20	23	36	44	40	37	53	36	22	13	23	51
CFSM	.16	.43	.29	.31	.27	.81	.44	.29	.31	.18	.47	.84
IN.	.18	.48	.34	.35	.28	.93	.49	.33	.34	.21	.54	.94

CAL YR 1988 TOTAL 39603 MEAN 108 MAX 1210 MIN 10 CFSM .56 IN. 7.67
WTR YR 1989 TOTAL 27990 MEAN 76.7 MAX 590 MIN 13 CFSM .40 IN. 5.42

e Estimated

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
04...	1300	17002	17002	33	802	8.00	12.0	6.1	10.0	29	500
NOV											
17...	0900	17002	17002	147	900	7.40	6.0	10	12.4	33	K190
JAN											
04...	0930	17002	17002	33	839	7.70	0.0	5.5	12.3	20	K60
FEB											
10...	0930	17002	17002	54	877	7.70	1.0	2.6	10.4	21	40
APR											
05...	0930	17002	17002	102	740	7.80	8.0	6.9	10.1	31	410
05...	0945	81700	80020	95	735	8.60	7.0	--	11.4	--	--
MAY											
25...	1330	81700	80020	95	659	8.00	21.5	--	7.7	--	--
26...	0830	17002	17002	77	741	7.70	18.5	5.7	6.7	40	1700
JUN											
23...	1000	17002	17002	32	791	7.90	24.5	18	7.8	24	K900
AUG											
03...	0900	17002	17002	182	769	8.40	26.0	5.8	10.5	49	490

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT											
04...	380	380	78	76	47	45	28	28	3.3	2.9	17
NOV											
17...	430	430	96	92	50	48	24	24	2.8	2.5	20
JAN											
04...	390	390	86	80	50	47	28	27	2.2	2.0	18
FEB											
10...	370	370	83	77	47	43	30	28	2.1	1.9	3
APR											
05...	370	370	82	81	40	40	20	21	2.3	1.7	29
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
26...	330	330	73	65	44	41	28	27	1.7	1.5	81
JUN											
23...	370	370	79	75	45	44	26	26	2.5	1.7	46
AUG											
03...	320	320	64	59	45	43	39	38	2.6	2.0	49

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)
OCT											
04...	8	2.00	--	0.110	0.002	0.89	1.0	3.0	0.140	0.080	390
NOV											
17...	6	6.00	--	0.220	<0.001	1.6	1.8	7.8	0.140	0.080	400
JAN											
04...	8	2.60	--	0.270	0.001	1.1	1.4	4.0	0.120	0.050	170
FEB											
10...	2	2.50	--	0.460	0.002	0.74	1.2	3.7	0.080	0.040	90
APR											
05...	6	3.00	--	0.040	<0.001	1.3	1.3	4.3	0.190	0.140	520
05...	--	--	3.10	--	--	--	--	--	--	--	--
MAY											
25...	--	--	0.960	--	--	--	--	--	--	--	--
26...	25	0.900	--	0.230	0.004	1.4	1.6	2.5	0.240	0.040	1500
JUN											
23...	12	1.30	--	0.080	0.003	1.1	1.2	2.5	0.290	0.170	770
AUG											
03...	22	1.00	--	0.050	0.007	2.4	2.5	3.5	0.290	0.060	470

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT											
04...	130	40	--	<0.5	<0.5	70	70	<3	<3	12	20
NOV											
17...	190	60	51	<0.5	<0.5	<50	<50	<3	<3	<5	<5
JAN											
04...	<50	30	23	<0.5	<0.5	60	60	<3	<3	5	<5
FEB											
10...	<50	50	41	<0.5	<0.5	<50	<50	<3	<3	<5	<5
APR											
05...	240	50	49	<0.5	<0.5	<50	<50	<3	<3	<5	<5
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
26...	1000	80	60	<0.5	<0.5	50	<50	<3	<3	7	<5
JUN											
23...	150	70	60	<0.5	<0.5	<50	<50	<3	<3	<5	5
AUG											
03...	90	70	61	<0.5	<0.5	60	50	<3	<3	<5	<5

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
04...	<5	5	<5	<5	570	<50	<5	<5	43	17
NOV										
17...	<5	<5	<5	<5	500	50	<5	<5	59	27
JAN										
04...	<5	<5	<5	<5	490	<50	9	<5	60	25
FEB										
10...	<5	<5	<5	<5	240	<50	<5	<5	41	29
APR										
05...	<5	<5	<5	<5	660	<50	<5	<5	92	45
05...	--	--	--	--	--	--	--	--	--	--
MAY										
25...	--	--	--	--	--	--	--	--	--	--
26...	<5	<5	<5	<5	2200	120	<5	<5	200	45
JUN										
23...	<5	<5	<5	9	1200	<50	<5	<5	130	42
AUG										
03...	<5	<5	<5	<5	1400	<50	<5	<5	140	29

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
04...	12	13	<3	<3.0	190	--	<5	5	<50	<50
NOV										
17...	8	<5	<3	<3.0	220	210	<5	<5	<50	<50
JAN										
04...	7	5	<3	<3.0	200	190	<5	<5	<50	<50
FEB										
10...	<5	<5	<3	<3.0	200	180	<5	<5	<50	<50
APR										
05...	6	6	<3	<3.0	170	170	<5	<5	<50	<50
05...	--	--	--	--	--	--	--	--	--	--
MAY										
25...	--	--	--	--	--	--	--	--	--	--
26...	16	10	<3	<3.0	170	160	<5	<5	<50	<50
JUN										
23...	15	<5	<3	<5.0	190	190	6	8	<50	<50
AUG										
03...	<50	<50	<3	<3.0	200	190	<5	<5	<50	<50

05548500 FOX RIVER AT JOHNSBURG, IL

LOCATION.--Lat 42°22'35", long 88°14'15", in SW1/4SW1/4 sec.18, T.45 N., R.9 E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Chapel Hill Road in Johnsburg, 5.5 mi upstream from McHenry Dam and at mile 103.0.

DRAINAGE AREA.--1,205 mi^2.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 14, 1939, nonrecording gage at same site at datum 2.16 ft higher. Dec. 14, 1939, to Sept. 30, 1971, at datum 2.16 ft higher.

REMARKS.--Stage regulated by McHenry Dam 5.5 mi downstream from station. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.55 ft, present datum, Apr. 6, 1960; minimum, 1.43 ft, present datum, Mar. 9, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.48 ft, Aug. 5, Sept. 4-6; minimum, 1.60 ft, Nov. 16.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.85	3.23	2.25	2.05	e2.24	1.88	2.80	4.01	4.10	3.95	4.26	e4.27
2	e3.93	3.16	2.13	2.05	2.38	1.88	2.80	3.97	e4.12	3.94	4.26	4.32
3	e3.92	e2.95	2.17	2.06	2.32	1.88	2.78	3.94	e4.22	3.93	4.20	4.42
4	e3.95	e2.91	2.21	2.07	e2.25	1.90	2.65	3.91	e4.26	e3.88	4.36	4.47
5	e3.94	e2.83	2.12	2.04	e2.20	1.95	2.70	3.85	4.27	e3.84	4.40	4.48
6	e3.91	2.72	2.07	2.07	e2.18	2.01	2.73	e3.97	e4.24	e3.84	4.42	4.45
7	e3.88	2.70	2.16	2.02	e2.15	1.94	2.72	e3.93	e4.19	e3.84	4.36	4.43
8	e3.85	2.66	2.16	1.81	e2.13	1.93	2.70	e3.93	e4.18	e3.82	4.29	4.36
9	e3.84	2.59	2.12	1.83	e2.12	1.94	2.57	e3.96	e4.23	e3.76	4.29	4.31
10	3.78	2.54	2.14	1.88	e2.09	2.00	2.58	3.93	e4.19	e3.77	4.28	4.23
11	e3.83	2.49	2.11	1.97	e2.10	2.11	2.51	e3.89	e4.13	e3.79	4.28	4.15
12	e3.80	2.49	2.07	1.96	e2.11	2.38	2.67	e3.87	e4.13	e3.80	4.28	4.11
13	3.75	2.36	2.05	1.98	e2.12	2.50	2.70	e3.86	e4.13	e3.80	4.28	4.12
14	3.69	2.37	2.04	1.98	e2.12	2.59	2.69	e3.83	e4.12	3.79	4.26	4.11
15	3.66	2.33	2.07	1.96	e2.12	2.68	2.93	e3.82	e4.11	3.80	e4.34	4.07
16	3.62	1.75	2.02	1.96	e2.12	2.71	2.96	e3.83	e4.06	3.80	e4.31	4.07
17	3.71	2.09	2.00	1.92	e2.12	2.87	3.18	e3.83	4.02	3.80	e4.26	4.05
18	3.73	2.41	1.93	1.96	e2.1	2.87	3.30	e3.81	4.04	3.82	e4.23	4.03
19	3.72	2.45	1.88	1.92	e2.11	2.84	3.42	e3.84	4.05	3.83	e4.15	4.01
20	3.65	2.43	1.77	1.93	e2.11	2.84	3.46	e3.90	4.05	3.90	e4.12	4.00
21	3.57	2.36	1.93	1.92	e2.10	2.82	3.67	e3.90	4.04	3.92	e4.15	3.97
22	3.54	2.29	1.97	1.83	e2.10	2.77	3.77	3.92	4.02	3.94	e4.15	3.95
23	3.45	2.26	1.81	1.83	2.08	2.71	3.87	3.92	4.00	3.97	e4.13	3.93
24	3.37	2.21	1.96	1.83	2.04	2.65	3.90	3.86	4.02	3.99	e4.11	3.87
25	3.38	2.14	1.93	1.83	2.01	2.61	3.99	e3.98	4.02	4.00	e4.09	3.84
26	e3.33	2.18	1.97	e1.85	2.00	2.50	4.02	e3.97	3.99	4.00	e4.09	3.89
27	3.22	1.83	1.97	e1.82	1.97	2.39	4.03	e4.01	4.00	4.00	e4.12	3.89
28	3.24	2.07	1.96	e1.90	1.91	2.46	4.06	3.95	4.03	e4.09	e4.20	3.86
29	e3.26	2.22	1.99	e2.00	---	2.72	4.00	3.96	3.97	e4.09	e4.23	3.89
30	e3.27	2.20	1.99	e1.99	---	2.72	3.98	e4.04	3.94	e4.26	e4.21	3.90
31	3.16	---	2.03	e1.90	---	2.76	---	e4.06	---	e4.31	e4.11	---
MEAN	3.64	2.44	2.03	1.94	2.12	2.41	3.20	3.92	4.10	3.91	4.23	4.11
MAX	3.95	3.23	2.25	2.07	2.38	2.87	4.06	4.06	4.27	4.31	4.42	4.48
MIN	3.16	1.75	1.77	1.81	1.91	1.88	2.51	3.81	3.94	3.76	4.09	3.84

CAL YR 1988 MEAN 3.38 MAX 4.71 MIN 1.75
WTR YR 1989 MEAN 3.18 MAX 4.48 MIN 1.75

e Estimated

05549500 FOX RIVER NEAR MC HENRY, IL

LOCATION.--Lat 42°18'35", long 88°15'05", in NW1/4 sec.12, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank of main channel, 300 ft upstream from McHenry Dam, 2.5 mi downstream from McHenry, and at mile 97.8.

DRAINAGE AREA.--1,250 mi^2.

PERIOD OF RECORD.--June 1941 to current year (gage heights only).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.07 ft higher.

REMARKS.--Stage regulated by McHenry Dam. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.36 ft, present datum, Apr. 5, 1960; minimum, 0.32 ft, present datum, Feb. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.43 ft, Aug;. 5; minimum, 0.92 ft, Jan. 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.85	3.16	1.96	1.92	2.38	e1.67	2.10	4.01	4.18	3.92	4.25	4.25
2	3.92	3.06	1.75	1.93	2.32	e1.68	2.10	3.97	4.10	3.91	4.23	4.10
3	3.91	2.88	1.99	1.96	2.06	e1.70	2.09	3.94	4.21	3.89	4.18	4.10
4	3.94	2.79	2.03	1.96	2.09	e1.75	1.85	3.88	4.21	3.92	4.31	4.15
5	3.93	2.65	1.91	1.96	2.10	e1.80	1.99	3.85	4.22	3.87	4.26	4.20
6	3.90	2.43	1.85	1.97	2.10	e1.85	2.09	3.96	4.18	3.83	4.25	4.16
7	3.87	2.42	2.09	1.97	2.09	e1.84	2.21	3.91	4.15	3.84	4.23	4.11
8	3.85	2.36	2.06	e1.50	2.09	e1.83	2.32	3.93	4.17	3.82	4.23	4.01
9	3.83	2.29	2.00	e1.51	2.07	e1.86	2.21	3.97	4.23	3.74	4.26	3.83
10	3.76	2.22	2.04	e1.55	2.05	e1.90	2.39	3.92	4.19	3.76	4.27	3.84
11	3.82	2.06	1.93	e1.63	2.04	e1.93	2.39	3.89	4.12	3.85	4.27	3.86
12	3.80	2.02	1.90	e1.61	2.02	e1.98	2.68	3.90	4.15	3.84	4.27	3.85
13	3.72	1.85	1.88	e1.65	2.03	e2.08	2.68	3.90	4.16	3.87	4.28	3.91
14	3.59	1.85	1.93	e1.78	2.03	e2.18	2.66	3.86	4.12	3.83	4.26	3.91
15	3.55	1.60	1.99	e1.71	2.02	e2.28	2.97	3.85	4.12	3.81	4.32	3.90
16	3.53	1.32	1.85	e1.72	2.00	e2.36	2.96	3.86	4.06	3.83	4.30	3.93
17	3.68	1.57	1.81	e1.70	1.96	e2.47	3.23	3.84	4.00	3.81	4.26	3.90
18	3.71	1.96	1.74	e1.72	1.93	2.47	3.34	3.83	4.00	3.79	4.23	3.90
19	3.69	1.75	1.67	e1.70	1.91	2.34	3.45	3.84	4.05	3.94	4.14	3.93
20	3.56	1.77	1.58	e1.71	1.91	2.40	3.48	3.90	4.05	4.02	4.08	3.93
21	3.49	1.68	1.93	e1.72	1.90	2.37	3.79	3.89	4.04	3.98	4.15	3.91
22	3.46	1.65	1.91	e1.70	1.88	2.25	3.84	3.92	3.99	3.97	4.04	3.94
23	3.35	1.80	1.60	e1.70	1.77	2.17	3.92	3.92	3.97	3.98	4.17	3.93
24	3.29	1.86	1.91	e1.71	1.74	2.10	3.93	3.82	4.01	4.00	4.17	3.85
25	3.31	1.78	1.85	e1.70	1.70	2.06	4.04	3.97	3.99	4.01	4.13	3.83
26	3.29	1.85	1.90	1.84	1.71	1.88	4.00	3.96	3.97	4.00	4.08	3.93
27	3.04	1.40	1.87	1.79	e1.65	1.66	4.08	4.00	3.98	4.00	4.12	3.90
28	3.15	1.79	1.75	1.86	e1.63	1.82	4.09	3.94	4.04	4.16	4.20	3.85
29	3.25	1.96	1.82	1.98	---	2.10	3.99	3.95	3.96	4.09	4.21	3.92
30	3.24	1.92	1.83	1.97	---	1.85	3.97	4.03	3.91	4.25	4.20	3.92
31	3.03	---	1.87	1.87	---	1.94	---	4.05	---	4.26	4.10	---
MEAN	3.59	2.06	1.88	1.77	1.97	2.02	3.03	3.92	4.08	3.93	4.21	3.96
MAX	3.94	3.16	2.09	1.98	2.38	2.47	4.09	4.05	4.23	4.26	4.32	4.25
MIN	3.03	1.32	1.58	1.50	1.63	1.66	1.85	3.82	3.91	3.74	4.04	3.83

CAL YR 1988 MEAN 3.06 MAX 4.05 MIN 1.32
WTR YR 1989 MEAN 3.04 MAX 4.32 MIN 1.32

e Estimated

05550000 FOX RIVER AT ALGONQUIN, IL

LOCATION.--Lat 42°09'59", long 88°17'25", in NE1/4NW1/4 sec.34, T.43 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank 20 ft upstream from bridge on State Highway 62 (Chicago Street) in Algonquin, 140 ft upstream from Algonquin Dam, and at mile 81.6.

DRAINAGE AREA.--1,403 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1175: 1916. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 729.48 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 20, 1933, nonrecording gage at site 20 ft downstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Flow regulated by McHenry Dam, 16 mi upstream from station, and occasionally affected by wind action. Gage-height telemeter at station.

AVERAGE DISCHARGE.--74 years, 861 ft^3/s, 8.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,610 ft^3/s, Apr. 6, 1960, Apr. 2, 1979; maximum gage height, 4.50 ft, Apr. 1, 1916, from graph based on gage readings; no flow for part of Nov. 26, 1952, Nov. 20, 1953, Oct. 25, 1956, and Sept. 9, 14, 1958, result of windstorms; minimum daily discharge, 12 ft^3/s, Aug. 30, 31, 1934, July 28, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,950 ft^3/s, Sept 7; maximum gage height, 2.30 ft Sept. 6; minimum daily, 81 ft^3/s, Apr. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	456	853	515	583	472	1450	881	467	180	839	903
2	376	494	838	502	531	472	1440	837	461	180	860	1430
3	366	577	801	496	500	479	1430	787	588	179	815	1680
4	367	683	813	500	480	497	1380	642	665	184	863	1860
5	374	809	794	500	510	509	1420	572	659	170	1350	1910
6	356	807	733	504	515	508	1390	654	590	153	1720	1940
7	340	827	691	559	515	501	1330	633	552	150	1790	1950
8	336	810	637	540	518	492	1220	603	496	142	1610	1870
9	342	822	613	526	542	497	1120	539	483	132	1320	1850
10	322	875	548	399	560	525	983	506	478	126	1010	1850
11	337	952	517	407	544	679	683	473	441	144	889	1720
12	311	956	511	412	518	798	564	442	457	139	853	1650
13	287	932	e520	412	515	1000	453	394	469	142	910	1630
14	293	953	e520	494	515	1250	307	349	446	135	830	1630
15	292	963	515	490	515	1360	196	348	429	123	725	1520
16	317	882	461	439	517	1360	112	358	398	121	681	1310
17	341	917	464	442	512	1350	127	344	349	113	638	1250
18	320	978	463	480	507	1280	97	305	328	120	583	1220
19	323	987	461	490	504	1260	98	286	356	179	519	1050
20	386	995	462	501	509	1270	81	297	345	258	468	884
21	502	995	455	477	506	1260	123	300	282	315	464	810
22	513	994	483	483	500	1220	103	303	231	322	421	742
23	521	966	526	497	487	1210	136	299	212	320	400	653
24	516	870	548	522	480	1200	192	254	215	326	404	547
25	504	833	537	508	486	1210	420	307	219	338	383	491
26	469	853	530	513	488	1150	568	304	229	340	350	423
27	390	732	550	525	481	1130	602	315	229	335	354	350
28	441	754	527	516	481	1160	749	287	249	371	382	299
29	449	765	535	539	---	1310	829	263	229	390	520	288
30	427	830	520	535	---	1460	856	312	197	560	591	291
31	396	---	525	526	---	1520	---	351	---	652	557	---
TOTAL	11851	25267	17951	15249	14319	30389	20459	13545	11749	7339	24119	36001
MEAN	382	842	579	492	511	980	682	437	392	237	778	1200
MAX	521	995	853	559	583	1520	1450	881	665	652	1790	1950
MIN	287	456	455	399	480	472	81	254	197	113	350	288
CFSM	.27	.60	.41	.35	.36	.70	.49	.31	.28	.17	.55	.86
IN.	.31	.67	.48	.40	.38	.81	.54	.36	.31	.19	.64	.95

CAL YR 1988 TOTAL 293078 MEAN 801 MAX 3030 MIN 77 CFSM .57 IN. 7.77
WTR YR 1989 TOTAL 228238 MEAN 625 MAX 1950 MIN 81 CFSM .45 IN. 6.05

e Estimated

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 06.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC- ITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT												
12...	0845	81700	17002	1	300	E0.50	1.21	301	794	8.30	--	11.0
12...	0846	81700	80020	1	300	E0.50	1.21	301	749	8.24	--	--
NOV												
08...	0830	81700	17002	1	300	--	1.63	806	753	8.40	5.0	6.0
08...	0831	81700	80020	1	300	--	1.63	806	732	8.51	5.0	--
DEC												
07...	0800	81700	17002	1	300	E0.50	1.55	710	788	9.10	1.0	1.5
07...	0801	81700	80020	1	300	E0.50	1.55	710	768	8.68	1.0	--
JAN												
11...	0930	81700	17002	11	300	E0.0	1.25	379	978	7.96	2.0	0.0
11...	0931	81700	80020	11	300	E0.0	1.25	379	985	8.39	2.0	--
11...	0945	81700	17002	11	300	E0.0	1.25	379	978	7.96	2.0	0.0
11...	0946	81700	80020	11	300	E0.0	1.25	379	946	8.41	2.0	--
FEB												
07...	0845	81700	17002	6	289	E0.50	1.38	515	806	7.60	-10.5	0.5
07...	0846	81700	80020	6	289	E0.50	1.38	515	802	8.46	-10.5	--
MAR												
08...	0845	81700	17002	10	115	E2.50	1.35	482	940	7.40	-2.0	0.5
08...	0846	81700	80020	10	115	E2.50	1.35	482	985	8.43	-2.0	--
APR												
05...	0745	81700	17002	9	300	E0.50	1.99	1380	695	8.60	9.0	8.0
05...	0746	81700	80020	9	300	E0.50	1.99	1380	695	9.12	9.0	--
MAY												
11...	0830	81700	17002	9	300	E0.50	1.40	482	742	8.30	18.0	13.0
11...	0831	81700	80020	9	300	E0.50	1.40	482	743	9.03	18.0	--
JUN												
06...	0800	81700	17002	10	300	E0.50	1.47	581	755	8.20	26.0	22.0
06...	0801	81700	80020	10	300	E0.50	1.48	581	756	8.56	26.0	--
JUL												
11...	0915	81700	17002	9	300	E0.50	1.00	139	804	8.20	30.0	29.0
11...	0916	81700	80020	9	300	E0.50	1.02	139	823	8.51	30.0	--
25...	1115	81700	80020	10	300	E0.0	1.27	330	872	8.80	34.5	--
AUG												
09...	0820	81700	17002	10	300	E0.50	1.94	1350	700	8.50	24.0	22.0
09...	0821	81700	80020	10	300	E0.50	1.97	1350	697	8.71	24.0	--
31...	0801	81700	80020	10	300	E0.50	1.45	593	694	8.40	23.0	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)
OCT											
12...	13	9.2	54	200	--	310	89	1.0	53	51	45
12...	--	--	--	--	--	--	--	1.0	--	--	--
NOV											
08...	5.8	10.0	39	210	--	310	81	--	57	54	44
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	3.0	15.7	29	--	--	380	130	<0.1	80	79	44
07...	--	--	--	87	80	380	380	0	--	79	--
JAN											
11...	5.2	15.5	28	<10	--	390	100	0	81	80	47
11...	--	--	--	--	--	--	--	0	--	--	--
11...	5.1	15.5	19	<10	--	390	110	0	81	80	47
11...	--	--	--	--	--	--	--	0	--	--	--
FEB											
07...	3.1	12.9	18	K60	--	350	110	0	72	72	42
07...	--	--	--	--	K33	--	--	0	--	--	--
MAR											
08...	3.2	15.5	19	K20	--	370	72	0	83	77	48
08...	--	--	--	--	30	360	360	0	--	75	--
APR											
05...	18	11.9	44	K40	--	300	98	0	72	67	34
05...	--	--	--	--	210	--	--	0	--	--	--
MAY											
11...	17	11.2	46	<10	--	330	130	0	69	64	42
11...	--	--	--	--	K14	--	--	0	--	--	--
JUN											
06...	6.7	9.7	47	40	--	320	110	0	66	62	41
06...	--	--	--	--	K35	--	--	0	--	--	--
JUL											
11...	34	7.9	52	K60	--	330	110	0	68	60	45
11...	--	--	--	--	K22	--	--	0	--	--	--
25...	--	--	--	--	--	--	--	0	--	--	--
AUG											
09...	46	8.0	66	K50	--	260	75	0	56	48	37
09...	--	--	--	--	43	--	--	0	--	--	--
31...	--	--	--	--	77	--	--	0	--	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
12...	45	50	49	3.8	3.5	--	--	--	--	225	46
12...	--	--	--	--	--	0	273	220	224	--	--
NOV											
08...	42	43	41	3.6	3.4	--	--	--	--	228	--
08...	--	--	--	--	--	90	95	230	228	--	--
DEC											
07...	44	35	36	3.0	3.0	--	--	--	--	249	--
07...	45	--	38	--	3.1	0	304	250	249	--	--
JAN											
11...	46	54	54	3.3	3.2	--	--	--	--	286	--
11...	--	--	--	--	--	0	349	290	286	--	--
11...	47	56	56	3.4	3.4	--	--	--	--	282	--
11...	--	--	--	--	--	0	344	280	282	--	--
FEB											
07...	42	44	44	3.2	3.1	--	--	--	--	246	--
07...	--	--	--	--	--	0	298	250	244	--	--
MAR											
08...	44	68	64	4.0	3.7	--	--	--	--	303	--
08...	42	--	60	--	3.7	0	367	300	301	--	--
APR											
05...	33	28	28	1.7	1.4	--	--	--	--	206	--
05...	--	--	--	--	--	0	249	210	204	--	--
MAY											
11...	42	37	38	1.9	1.9	--	--	--	--	207	82
11...	--	--	--	--	--	0	254	210	208	--	--
JUN											
06...	40	38	38	3.0	2.7	--	--	--	--	213	74
06...	--	--	--	--	--	0	260	210	213	--	--
JUL											
11...	43	49	48	3.5	3.0	--	--	--	--	216	70
11...	--	--	--	--	--	0	261	220	214	--	--
25...	--	--	--	--	--	0	270	220	221	--	--
AUG											
09...	35	42	41	2.9	3.6	--	--	--	--	190	61
09...	--	--	--	--	--	0	227	190	186	--	--
31...	--	--	--	--	--	0	245	200	201	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT											
12...	47	86	0.3	0.33	--	--	472	422	16	9	--
12...	--	--	--	--	--	--	--	--	--	--	0.050
NOV											
08...	56	77	0.3	--	--	--	440	415	16	12	--
08...	--	--	--	--	--	0.020	--	--	--	--	0.040
DEC											
07...	100	68	0.2	--	--	--	523	491	17	9	--
07...	--	--	--	0.20	4.1	--	--	--	--	--	0.030
JAN											
11...	93	100	0.3	--	--	--	592	566	6	6	--
11...	--	--	--	--	--	--	--	--	--	--	0.030
11...	94	100	0.3	--	--	--	616	569	10	8	--
11...	--	--	--	--	--	--	--	--	--	--	0.030
FEB											
07...	86	80	0.3	--	--	--	510	486	4	3	--
07...	--	--	--	--	--	0.019	--	--	--	--	0.040
MAR											
08...	78	120	0.3	--	--	--	594	574	3	2	--
08...	--	--	--	0.30	4.5	--	--	--	--	--	0.040
APR											
05...	76	57	0.2	--	--	--	412	399	40	7	--
05...	--	--	--	--	--	--	--	--	--	--	0.050
MAY											
11...	84	68	0.3	0.24	--	--	448	425	46	23	--
11...	--	--	--	--	--	0.010	--	--	--	--	0.020
JUN											
06...	76	72	0.2	0.23	--	--	446	424	37	20	--
06...	--	--	--	--	--	--	--	--	--	--	0.030
JUL											
11...	69	86	0.4	0.34	--	--	524	440	47	28	--
11...	--	--	--	--	--	--	--	--	--	--	<0.010
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	65	79	0.4	0.28	--	--	522	387	74	38	--
09...	--	--	--	--	--	0.020	--	--	--	--	<0.010
31...	--	--	--	--	--	--	--	--	--	--	<0.010

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
12...	0.400	0.400	0.980	0.960	0.041	--	3.2	--	0.180	0.060	--
12...	--	<0.100	--	0.920	--	1.2	3.1	2.1	0.150	0.050	0.040
NOV											
08...	0.500	0.500	0.710	0.690	0.024	--	2.5	--	0.120	0.010	--
08...	--	0.550	--	0.680	--	--	2.5	<1.5	0.090	0.020	<0.010
DEC											
07...	2.30	2.30	0.150	0.120	0.017	--	1.7	--	0.100	<0.010	--
07...	--	2.30	--	0.120	--	0.68	1.7	0.80	0.100	0.010	<0.010
JAN											
11...	2.40	2.40	0.200	0.190	0.002	--	1.5	--	0.110	0.010	--
11...	--	2.30	--	0.190	--	0.91	1.3	1.1	0.070	0.010	<0.010
11...	2.40	2.40	0.200	0.190	0.002	--	1.4	--	0.100	0.010	--
11...	--	2.20	--	0.230	--	0.97	1.3	1.2	0.080	0.010	<0.010
FEB											
07...	2.10	2.00	0.500	0.480	0.002	--	1.9	--	0.130	0.010	--
07...	--	1.80	--	0.500	--	0.60	1.5	1.1	0.100	0.020	0.010
MAR											
08...	2.20	2.20	0.510	0.500	0.001	--	1.4	--	0.120	0.060	--
08...	--	2.10	--	0.540	--	0.56	1.7	1.1	0.130	0.060	0.050
APR											
05...	2.80	2.80	0.090	0.080	0.006	--	1.6	--	0.150	0.020	--
05...	--	2.60	--	0.070	--	1.1	1.5	1.2	0.140	<0.010	<0.010
MAY											
11...	0.300	0.300	0.030	0.020	0.001	--	2.4	--	0.190	0.020	--
11...	--	0.280	--	<0.010	--	--	1.2	0.70	0.150	0.020	<0.010
JUN											
06...	0.400	0.400	0.080	0.070	0.006	--	1.9	--	0.140	0.010	--
06...	--	0.360	--	0.060	--	0.84	1.9	0.90	0.140	<0.010	<0.010
JUL											
11...	<0.100	<0.100	0.040	0.040	0.005	--	1.8	--	0.220	0.070	--
11...	--	<0.100	--	<0.010	--	--	1.0	0.60	0.120	0.030	0.050
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	<0.100	<0.100	0.060	0.040	0.008	--	1.6	--	0.270	0.060	--
09...	--	<0.100	--	0.020	--	0.68	2.2	0.70	0.240	0.060	0.040
31...	--	<0.100	--	0.020	--	0.98	1.5	1.0	0.180	0.030	0.020

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
12...	190	<50	--	3	3	60	52	<0.5	<0.5	80	90
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	260	160	--	2	1	60	51	<0.5	<0.5	60	60
08...	--	--	<1	--	--	--	--	--	--	--	--
DEC											
07...	120	<50	--	1	1	50	49	<0.5	<0.5	60	--
07...	90	<10	--	--	--	100	50	<10	<0.5	80	60
JAN											
11...	110	60	--	1	<1	50	51	<0.5	<0.5	70	70
11...	--	--	--	--	--	--	--	--	--	--	--
11...	100	80	--	1	<1	50	53	<0.5	<0.5	70	70
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	110	80	--	1	<1	50	46	<0.5	<0.5	70	--
07...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
08...	150	100	--	<1	<1	70	63	<0.5	<0.5	80	80
08...	90	10	--	--	--	100	96	<10	<0.5	60	70
APR											
05...	600	150	--	1	<1	50	43	<0.5	<0.5	<50	<50
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	580	250	--	2	1	60	58	<2.0	<2	60	60
11...	--	--	<1	--	--	--	--	--	--	--	--
JUN											
06...	730	390	--	2	2	70	63	<0.5	<0.5	70	70
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	1500	70	--	3	2	80	67	<0.5	<0.5	90	80
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	580	80	--	4	4	60	50	<0.5	<0.5	70	70
09...	--	--	2	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
OCT											
12...	0.48	0.17	<5	<5	<5	<5	26	<5	410	65	<5
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	<0.1	<0.1	10	7	<5	<5	<5	<5	230	<50	7
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	<0.1	0.1	5	--	<5	<5	<5	<5	160	<50	<5
07...	<1	<1	2	<5	--	<3	10	<10	240	7	<5
JAN											
11...	0.1	0.2	11	9	<5	<5	<5	<5	180	<50	<5
11...	--	--	--	--	--	--	--	--	--	--	--
11...	<0.1	--	<5	<5	<5	<5	<5	<5	280	100	<5
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	0.2	0.2	11	6	<5	7	17	--	120	<50	<5
07...	--	--	--	--	--	--	--	--	--	--	--
MAR											
08...	0.2	0.2	<5	<5	<5	<5	<5	<5	140	<50	<5
08...	1	<1	2	<5	--	<3	<10	<10	240	17	<5
APR											
05...	<0.1	<0.1	5	<5	<5	<5	<5	<5	740	<50	<5
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	0.1	<0.1	<5	<5	<5	<5	<5	<5	640	<50	<5
11...	--	--	--	--	--	--	--	--	--	--	--
JUN											
06...	0.2	<0.1	5	<5	<5	<5	<5	<5	590	<50	<5
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	0.2	0.1	8	9	<5	<5	<5	<5	750	<50	6
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	<0.1	<0.1	10	<5	<5	<5	<5	<5	920	<50	<5
09...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT											
12...	<5	34	<5	--	--	--	14	<5	<1	<3	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	<5	42	<5	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	3	--	--	--	--	--
DEC											
07...	<5	21	<5	--	--	--	<5	<5	<1	<3	<3.0
07...	<10	30	2	<0.10	<0.1	<10	4	<10	--	<1	<1.0
JAN											
11...	<5	22	<5	--	--	--	<5	<5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
11...	<5	23	5	--	--	--	<5	<5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	<5	62	--	--	--	--	9	7	<1	<3	<3.0
07...	--	--	--	--	--	4	--	--	--	--	--
MAR											
08...	<5	28	20	--	--	--	<5	<5	<1	<3	<3.0
08...	<10	40	22	E0.05	E0.05	<10	3	<10	--	<1	<1.0
APR											
05...	<5	77	7	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
05...	--	--	--	<0.10	<0.1	--	--	--	--	--	--
MAY											
11...	<5	73	<5	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
11...	--	--	--	--	--	2	--	--	--	--	--
JUN											
06...	<5	50	<5	--	--	--	<5	<5	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	<5	86	12	--	--	--	<5	<5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	<5	100	<5	--	--	--	<10	<5	<1	<3	<3.0
09...	--	--	--	--	--	3	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
12...	600	590	<5	<5	180	<50	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	880	830	<5	<5	<50	<50	--	--	--	--	--
08...	--	--	--	--	--	--	1.3	0.4	5.4	1.0	3.9
DEC											
07...	860	--	<5	<5	<50	<50	--	--	--	--	--
07...	--	890	--	<6	<10	32	--	--	--	--	--
JAN											
11...	1200	1200	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	1200	1200	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
07...	980	970	<5	<5	440	--	--	--	--	--	--
07...	--	--	--	--	--	--	3.8	<0.4	5.5	<0.4	3.8
MAR											
08...	1100	1000	<5	<5	<50	<50	--	--	--	--	--
08...	--	990	--	<6	<10	18	--	--	--	--	--
APR											
05...	640	620	<5	<5	<50	<50	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	710	700	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	1.6	0.7	1.5	0.8	1.2
JUN											
06...	640	630	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	710	680	<5	<5	<50	<50	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	660	630	<5	<5	<100	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
12...	--	16	--	--	1.0	<0.005	5	1	--	--	--
12...	--	--	10	1.5	--	--	--	--	14	11	84
NOV											
08...	--	13	--	--	1.0	<0.005	5	<1	--	--	--
08...	1.0	--	6.3	1.9	--	--	--	--	10	22	97
DEC											
07...	--	12	--	--	<0.005	<0.005	<5	1	--	--	--
07...	--	13	7.3	1.8	<0.01	<0.010	--	--	11	21	100
JAN											
11...	--	--	--	--	3.0	<0.005	4	<1	--	--	--
11...	--	--	6.5	1.1	--	--	--	--	26	27	93
11...	--	8.9	--	--	4.0	<0.005	5	1	--	--	--
11...	--	--	5.0	0.9	--	--	--	--	32	33	92
FEB											
07...	--	9.7	--	--	1.0	<0.005	2	<1	--	--	--
07...	<0.4	--	6.3	0.9	--	--	--	--	146	203	100
MAR											
08...	--	7.8	--	--	--	<0.005	4	<1	--	--	--
08...	--	7.1	5.5	0.5	<0.01	<0.010	--	--	12	16	85
APR											
05...	--	12	--	--	--	<0.005	2	1	--	--	--
05...	--	--	7.4	3.2	--	--	--	--	32	119	94
MAY											
11...	--	13	--	--	--	<0.005	7	<1	--	--	--
11...	0.6	--	7.1	2.7	--	--	--	--	33	43	98
JUN											
06...	--	15	--	--	2.0	<0.005	5	2	--	--	--
06...	--	--	7.8	>5.0	--	--	--	--	28	44	98
JUL											
11...	--	14	--	--	<5.0	<0.005	5	--	--	--	--
11...	--	--	8.4	>5.0	--	--	--	--	34	13	96
25...	--	--	7.7	4.4	--	--	--	--	28	25	98
AUG											
09...	--	16	--	--	<5.0	<0.005	4	--	--	--	--
09...	--	--	8.9	>5.0	--	--	--	--	53	193	81
31...	--	--	9.9	>5.0	--	--	--	--	29	46	100

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT											
12...	0900	81700	81700	1.00	1	300	290	794	8.30	11.0	9.2
NOV											
08...	0840	81700	81700	1.00	1	300	290	753	8.40	6.0	10.0
DEC											
07...	0810	81700	81700	1.00	1	300	290	788	9.10	1.5	15.7
JAN											
11...	0915	81700	81700	1.00	1	300	25.0	950	--	0.0	17.2
11...	0920	81700	81700	1.00	1	300	50.0	970	8.04	0.5	16.0
11...	0925	81700	81700	1.00	1	300	75.0	971	8.06	0.0	15.6
11...	0932	81700	81700	1.00	1	300	100	978	8.00	0.0	15.9
11...	0933	81700	81700	1.00	1	300	125	979	7.99	0.0	15.5
11...	0934	81700	81700	5.00	1	300	125	979	7.97	0.5	15.2
11...	0935	81700	81700	1.00	1	300	150	977	7.94	0.0	15.4
11...	0936	81700	81700	5.00	1	300	150	978	7.96	0.0	15.5
11...	0937	81700	81700	1.00	1	300	175	979	7.99	0.0	15.5
11...	0938	81700	81700	4.00	1	300	175	978	7.96	0.5	15.4
11...	0939	81700	81700	1.00	1	300	200	978	7.96	0.0	15.5
11...	0940	81700	81700	5.00	1	300	200	978	7.98	0.0	16.0
11...	0941	81700	81700	1.00	1	300	225	979	7.98	0.0	15.9
11...	0942	81700	81700	1.00	1	300	250	973	7.96	0.0	15.5
11...	0943	81700	81700	4.00	1	300	250	977	7.96	0.0	15.5
11...	0944	81700	81700	1.00	1	300	275	954	7.98	0.5	15.4
FEB											
07...	0841	81700	81700	3.00	1	289	249	796	7.90	1.0	12.4
07...	0844	81700	81700	2.50	1	289	219	769	7.80	1.0	12.7
07...	0847	81700	81700	2.50	1	289	174	799	7.80	0.5	12.8
07...	0850	81700	81700	3.00	1	289	144	806	7.60	0.5	12.9
07...	0852	81700	81700	3.00	1	289	104	803	7.60	0.5	12.8
07...	0853	81700	81700	2.00	1	289	39.0	799	7.50	0.5	12.9
MAR											
08...	0909	81700	81700	0.25	1	115	10.0	950	7.60	0.5	15.4
08...	0910	81700	81700	0.50	1	115	20.0	951	7.60	0.5	15.4
08...	0911	81700	81700	1.00	1	115	30.0	948	7.50	0.5	15.5
08...	0912	81700	81700	1.00	1	115	40.0	945	7.40	0.5	15.5
08...	0913	81700	81700	1.00	1	115	50.0	940	7.40	0.5	15.6
08...	0914	81700	81700	1.00	1	115	60.0	937	7.50	0.5	15.4
08...	0915	81700	81700	1.00	1	115	70.0	940	7.40	0.5	15.5
08...	0916	81700	81700	1.00	1	115	80.0	952	7.50	0.5	15.4
08...	0917	81700	81700	1.00	1	115	90.0	960	7.40	0.5	15.5
08...	0918	81700	81700	1.00	1	115	100	1040	7.40	0.5	15.1
APR											
05...	0747	81700	81700	1.00	1	300	20.0	--	8.50	8.0	11.6
05...	0748	81700	81700	1.00	1	300	50.0	--	8.50	8.0	11.7
05...	0749	81700	81700	1.00	1	300	80.0	680	8.50	8.0	11.9
05...	0750	81700	81700	1.00	1	300	110	681	8.60	8.0	11.9
05...	0751	81700	81700	1.00	1	300	140	695	8.60	8.0	11.9
05...	0752	81700	81700	1.00	1	300	170	--	8.60	8.0	11.9
05...	0753	81700	81700	1.00	1	300	200	--	8.60	8.0	12.0
05...	0754	81700	81700	1.00	1	300	230	691	8.70	8.0	11.8
05...	0755	81700	81700	1.00	1	300	260	670	8.60	8.0	11.7
MAY											
11...	0815	81700	81700	1.00	1	300	20.0	738	8.00	12.5	11.3
11...	0816	81700	81700	1.00	1	300	50.0	743	8.10	13.0	11.2
11...	0817	81700	81700	1.00	1	300	80.0	742	8.20	13.0	11.2
11...	0818	81700	81700	5.00	1	300	80.0	742	8.30	12.5	11.1
11...	0819	81700	81700	1.00	1	300	110	741	8.30	13.0	11.2
11...	0820	81700	81700	5.00	1	300	110	741	8.30	13.0	11.2
11...	0821	81700	81700	1.00	1	300	140	742	8.30	13.0	11.2
11...	0822	81700	81700	5.00	1	300	140	742	8.40	13.0	11.3
11...	0823	81700	81700	1.00	1	300	170	743	8.30	13.0	11.1
11...	0824	81700	81700	5.00	1	300	170	741	8.40	13.0	11.4
11...	0825	81700	81700	1.00	1	300	200	746	8.40	13.0	11.2
11...	0826	81700	81700	5.00	1	300	200	742	8.40	13.0	11.4
11...	0827	81700	81700	1.00	1	300	230	742	8.40	13.0	11.3
11...	0828	81700	81700	4.00	1	300	230	741	8.40	13.0	11.5
11...	0829	81700	81700	1.00	1	300	260	740	8.40	13.0	11.6

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SAM-PLING DEPTH (FEET) (00003)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
JUN											
06...	0756	81700	81700	1.00	1	300	20.0	756	7.90	22.0	9.6
06...	0758	81700	81700	1.00	1	300	50.0	756	8.10	22.0	9.8
06...	0802	81700	81700	1.00	1	300	80.0	751	8.20	22.0	9.9
06...	0803	81700	81700	5.00	1	300	80.0	754	8.10	22.0	9.2
06...	0804	81700	81700	1.00	1	300	110	756	8.20	22.0	9.9
06...	0805	81700	81700	5.00	1	300	110	755	8.10	22.0	9.2
06...	0807	81700	81700	1.00	1	300	140	754	8.20	22.0	9.8
06...	0808	81700	81700	5.00	1	300	140	755	8.20	22.0	9.3
06...	0810	81700	81700	1.00	1	300	170	755	8.20	22.0	9.7
06...	0811	81700	81700	5.00	1	300	170	763	8.20	22.0	9.5
06...	0812	81700	81700	1.00	1	300	200	756	8.20	22.0	9.8
06...	0813	81700	81700	5.00	1	300	200	763	8.20	22.0	9.5
06...	0815	81700	81700	1.00	1	300	230	759	8.20	22.0	9.9
06...	0816	81700	81700	5.00	1	300	230	762	8.20	22.0	9.6
06...	0818	81700	81700	1.00	1	300	260	758	8.20	22.0	9.9
06...	0821	81700	81700	1.00	1	300	290	758	8.20	22.0	10.1
JUL											
11...	0909	81700	81700	1.00	1	300	20.0	820	7.90	28.0	7.9
11...	0911	81700	81700	1.00	1	300	50.0	812	8.00	28.5	7.1
11...	0913	81700	81700	1.00	1	300	80.0	818	8.10	28.5	8.2
11...	0914	81700	81700	5.00	1	300	80.0	825	7.90	28.0	5.9
11...	0917	81700	81700	1.00	1	300	110	799	8.10	30.0	7.7
11...	0918	81700	81700	5.00	1	300	110	801	7.90	29.5	5.1
11...	0919	81700	81700	1.00	1	300	140	795	8.10	29.5	7.8
11...	0920	81700	81700	5.00	1	300	140	805	7.90	29.0	5.1
11...	0922	81700	81700	1.00	1	300	170	804	8.20	29.0	7.9
11...	0923	81700	81700	5.00	1	300	170	820	7.90	28.5	5.0
11...	0925	81700	81700	1.00	1	300	200	809	8.20	29.0	8.7
11...	0926	81700	81700	5.00	1	300	200	814	8.10	28.5	6.9
11...	0928	81700	81700	1.00	1	300	230	795	8.20	29.0	9.0
11...	0929	81700	81700	5.00	1	300	230	817	8.00	28.5	6.3
11...	0931	81700	81700	1.00	1	300	260	813	8.30	29.0	9.4
25...	1108	81700	81700	1.00	1	300	30.0	791	8.10	25.5	9.1
25...	1111	81700	81700	1.00	1	300	60.0	795	8.10	25.0	8.1
25...	1114	81700	81700	1.00	1	300	90.0	795	8.10	25.0	8.1
25...	1116	81700	81700	1.00	1	300	120	797	8.00	25.0	7.0
25...	1120	81700	81700	1.00	1	300	150	796	8.00	25.0	7.7
25...	1123	81700	81700	3.00	1	300	150	800	7.90	24.5	5.6
25...	1126	81700	81700	1.00	1	300	180	794	8.00	25.0	7.3
25...	1130	81700	81700	1.00	1	300	210	796	8.00	25.0	6.9
25...	1132	81700	81700	1.00	1	300	240	797	8.00	25.0	7.1
25...	1135	81700	81700	1.00	1	300	270	797	8.40	25.0	7.0
AUG											
09...	0805	81700	81700	1.00	1	300	20.0	692	8.40	22.0	7.7
09...	0806	81700	81700	1.00	1	300	50.0	692	8.40	22.0	7.6
09...	0807	81700	81700	1.00	1	300	80.0	694	8.40	22.0	7.6
09...	0808	81700	81700	5.00	1	300	80.0	696	8.40	22.0	7.5
09...	0809	81700	81700	1.00	1	300	110	700	8.40	22.0	7.8
09...	0810	81700	81700	5.00	1	300	110	700	8.40	22.0	7.6
09...	0811	81700	81700	1.00	1	300	140	701	8.40	22.0	7.8
09...	0812	81700	81700	5.00	1	300	140	705	8.40	22.0	7.7
09...	0813	81700	81700	1.00	1	300	170	700	8.50	22.0	8.0
09...	0814	81700	81700	5.00	1	300	170	711	8.50	22.0	7.8
09...	0815	81700	81700	1.00	1	300	200	705	8.50	22.0	8.0
09...	0816	81700	81700	1.00	1	300	230	707	8.40	22.0	8.0
09...	0817	81700	81700	1.00	1	300	260	709	8.40	22.0	8.1
09...	0818	81700	81700	1.00	1	300	290	708	8.50	22.0	8.4
31...	0758	81700	81700	1.00	1	300	20.0	714	8.50	23.5	8.6
31...	0759	81700	81700	1.00	1	300	50.0	713	8.40	23.5	8.5
31...	0802	81700	81700	1.00	1	300	80.0	713	8.50	23.5	8.8
31...	0803	81700	81700	5.00	1	300	80.0	715	8.50	23.5	8.3
31...	0804	81700	81700	1.00	1	300	110	715	8.50	23.5	8.6
31...	0805	81700	81700	5.00	1	300	110	715	8.50	23.5	8.4
31...	0806	81700	81700	1.00	1	300	140	714	8.50	23.5	8.9
31...	0807	81700	81700	5.00	1	300	140	715	8.50	23.5	8.4
31...	0808	81700	81700	1.00	1	300	170	712	8.50	23.5	8.5
31...	0809	81700	81700	5.00	1	300	170	715	8.40	23.5	8.5
31...	0810	81700	81700	1.00	1	300	200	714	8.50	24.0	8.7
31...	0811	81700	81700	5.00	1	300	200	714	8.50	23.5	8.5
31...	0812	81700	81700	1.00	1	300	230	714	8.50	24.0	8.6
31...	0813	81700	81700	1.00	1	300	260	714	8.50	24.0	8.7
31...	0814	81700	81700	1.00	1	300	290	713	8.50	23.5	9.0

ILLINOIS RIVER BASIN

05550500 POPLAR CREEK AT ELGIN, IL

LOCATION.--Lat 42°01'35", long 88°15'20", in SE1/4NW1/4 sec.19, T.41 N., R.9 E., Cook County, Hydrologic Unit 07120006, on right bank 35 ft upstream from bridge on U.S. Highway B.R. 20 (Villa Street) in Elgin, and at mile 2.3.

DRAINAGE AREA.--35.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1338. 1952-53. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 716.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 24.7 ft^3/s, 9.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 896 ft^3/s, Apr. 22, 1973, gage height, 5.45 ft; maximum gage height, 5.79 ft, Aug. 5, 1989; no flow for part of July 10, 1957, Sept. 14, 1958, July 18, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0700	249	3.29	Aug. 5	0815	*700	*5.79
Jan. 8	0900	267	3.39				

No flow for part of July 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.6	21	e15	31	e3.8	22	9.0	34	.98	41	110
2	4.4	2.4	19	e11	25	e3.7	20	6.7	31	.88	30	165
3	3.0	2.3	17	e8.5	e18	e3.8	20	5.6	24	.80	25	98
4	2.0	14	14	e7.3	e13	e6.4	22	5.0	24	.70	211	62
5	2.0	40	12	e7.3	e10	e29	21	4.8	18	.54	641	44
6	1.9	33	10	8.8	e8.2	e64	19	4.4	12	.43	474	72
7	1.3	26	9.8	24	e7.1	e50	16	3.5	8.5	.43	260	74
8	.82	20	7.9	219	e6.3	e30	13	2.9	5.8	.49	167	57
9	.70	20	6.8	224	e5.6	e22	11	2.7	3.9	.51	106	51
10	.57	54	5.9	75	e5.3	e35	9.6	2.5	3.0	.37	73	48
11	.69	52	5.7	28	e5.2	61	8.3	2.3	2.8	.67	48	35
12	.60	43	5.0	28	e5.4	56	9.7	2.1	13	4.7	35	26
13	.70	51	5.1	21	6.2	46	7.5	1.9	15	1.7	28	37
14	.77	41	5.3	16	6.8	42	7.1	1.8	13	.88	24	43
15	.59	35	4.9	13	6.6	50	7.7	1.7	9.6	.57	22	32
16	.85	71	4.6	10	e6.2	41	7.6	1.6	6.3	.50	17	24
17	16	85	4.1	8.5	e5.7	37	7.8	1.5	4.6	.39	14	19
18	50	58	e3.8	7.8	5.5	59	8.0	1.5	3.5	1.9	11	14
19	36	51	e3.6	8.1	5.4	50	7.8	3.3	2.7	27	8.7	11
20	21	49	5.0	7.9	5.6	40	7.2	5.2	1.8	48	9.6	9.0
21	15	38	5.1	7.5	5.6	34	6.5	3.7	1.5	47	8.4	7.2
22	10	28	5.4	7.3	e5.1	28	6.1	2.9	1.0	33	7.4	5.7
23	18	23	16	6.8	e4.5	24	5.8	2.2	5.3	25	6.4	5.2
24	19	19	17	6.8	e4.1	22	4.8	1.9	7.5	17	5.6	4.6
25	14	17	18	7.7	4.5	e20	5.3	5.7	4.6	14	5.0	3.9
26	9.9	31	12	16	4.7	e18	5.4	4.3	3.3	26	4.6	4.4
27	7.1	58	36	16	4.7	e17	4.6	3.4	2.2	33	5.0	5.9
28	5.4	49	134	15	e4.2	28	11	2.4	1.6	37	15	5.5
29	4.4	36	123	23	---	39	14	3.8	1.2	31	15	5.3
30	3.5	26	33	33	---	32	12	3.4	1.1	56	10	5.0
31	2.9	---	20	34	---	26	---	4.9	---	59	7.4	---
TOTAL	254.99	1075.3	590.0	921.3	225.5	1017.7	327.8	108.6	265.8	470.44	2335.1	1083.7
MEAN	8.23	35.8	19.0	29.7	8.05	32.8	10.9	3.50	8.86	15.2	75.3	36.1
MAX	50	85	134	224	31	64	22	9.0	34	59	641	165
MIN	.57	2.3	3.6	6.8	4.1	3.7	4.6	1.5	1.0	.37	4.6	3.9
CFSM	.23	1.02	.54	.84	.23	.93	.31	.10	.25	.43	2.14	1.03
IN.	.27	1.14	.62	.97	.24	1.08	.35	.11	.28	.50	2.47	1.15

CAL YR 1988 TOTAL 8743.14 MEAN 23.9 MAX 378 MIN .16 CFSM .68 IN. 9.24
WTR YR 1989 TOTAL 8676.23 MEAN 23.8 MAX 641 MIN .37 CFSM .68 IN. 9.17

e Estimated

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 27...	1000	17002	17002	7.0	747	7.50	6.5	9.0	12.0	20	180	260
DEC 07...	1100	17002	17002	9.9	900	7.90	2.5	6.4	14.9	16	5	370
JAN 05...	1030	17002	17002	7.3	1310	7.60	1.0	3.6	14.2	5	K10	400
FEB 14...	1200	17002	17002	6.2	1450	7.90	1.0	2.6	11.3	20	K120	400
APR 10...	1130	17002	17002	9.5	1280	8.20	6.0	3.2	14.2	27	K30	410
MAY 05...	1100	17002	17002	4.8	1300	7.70	15.0	3.1	11.5	17	K150	420
JUN 13...	1430	17002	17002	15	1010	7.70	20.0	7.1	8.7	26	--	340

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 27...	260	63	61	28	27	52	50	3.9	3.8	62	92
DEC 07...	370	86	84	40	39	53	52	2.8	2.7	98	96
JAN 05...	400	93	92	43	42	100	100	3.7	3.5	120	200
FEB 14...	400	94	91	43	42	110	110	3.5	3.3	120	230
APR 10...	410	93	93	44	44	120	120	1.6	1.2	120	190
MAY 05...	420	96	95	45	44	120	120	2.1	1.9	110	220
JUN 13...	340	80	77	36	35	84	82	3.0	3.0	83	150

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)
OCT 27...	296	5	2	0.600	0.040	<0.001	0.56	0.60	1.2	0.040	0.030
DEC 07...	372	1	1	1.20	0.010	<0.001	0.59	0.60	1.8	0.030	0.010
JAN 05...	562	2	2	1.00	0.020	<0.001	0.78	0.80	1.8	0.030	0.020
FEB 14...	604	5	3	1.00	0.060	<0.001	0.54	0.60	1.6	0.020	0.010
APR 10...	572	3	3	0.400	0.040	<0.001	0.46	0.50	0.90	0.020	0.010
MAY 05...	583	8	7	0.400	0.030	<0.001	0.67	0.70	1.1	0.030	0.020
JUN 13...	436	26	8	0.500	0.140	0.003	0.96	1.1	1.6	0.110	0.040

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)
OCT 27...	290	90	40	37	<0.5	<0.5	<50	<50	<3	<3	<5
DEC 07...	120	<50	30	26	<0.5	<0.5	70	70	<3	<3	<5
JAN 05...	70	<50	20	21	<0.5	<0.5	70	70	<3	<3	<5
FEB 14...	120	<50	50	48	<0.5	<0.5	60	50	<3	<3	<5
APR 10...	540	460	50	50	<0.5	<0.5	<50	50	<3	<3	<5
MAY 05...	990	950	60	55	<1.0	<1	60	60	<3	<3	<5
JUN 13...	890	310	60	57	<0.5	<0.5	60	--	<3	<3	<5

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT											
27...	<5	<5	<5	<5	<5	410	<50	<5	<5	20	15
DEC											
07...	<5	<5	<5	<5	<5	360	<50	<5	<5	30	22
JAN											
05...	<5	<5	<5	<5	<5	190	<50	<5	<5	30	26
FEB											
14...	<5	<5	<5	<5	<5	280	<50	<5	<5	52	45
APR											
10...	<5	<5	<5	<5	<5	290	<50	<5	<5	44	33
MAY											
05...	7	<5	<5	<5	7	280	71	<5	<5	41	33
JUN											
13...	<5	<5	<5	<5	<5	1200	69	<5	<5	130	69

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT											
27...	<5	<5	<3	<3.0	170	170	<5	<5	<50	<50	<1
DEC											
07...	<5	<5	<3	<3.0	200	--	<5	<5	<50	<50	2
JAN											
05...	<5	<5	<3	<3.0	230	--	<5	<5	<50	<50	1
FEB											
14...	8	<5	<3	<3.0	210	200	<5	<5	<50	<50	1
APR											
10...	<5	<5	<3	<3.0	200	--	<5	<5	<50	<50	1
MAY											
05...	<5	<5	<3	<3.0	220	220	<5	<5	<50	<50	1
JUN											
13...	6	<5	<3	<3.0	200	200	<5	<5	<50	<50	1

ILLINOIS RIVER BASIN

05551000 FOX RIVER AT SOUTH ELGIN, IL

LOCATION.--Lat 41°59'40", long 88°17'40", in SE1/4NW1/4 sec.35, T.41 N., R.8 E., Kane County, Hydrologic Unit 07120007, at bridge on State Street in South Elgin, 1.3 mi upstream from Brewster Creek, 1.5 mi downstream from Poplar Creek, and at mile 67.2.

DRAINAGE AREA.--1,556 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1960, 1964-67, 1969-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT 27...	0830	17002	17002	371	788	8.10	7.0	7.5	11.8	49	350	290
DEC 07...	0930	17002	17002	800	832	7.80	2.0	10	13.8	38	K970	350
JAN 05...	0900	17002	17002	520	1060	7.40	1.5	3.1	13.4	22	K80	390
FEB 14...	1330	17002	17002	570	1010	8.00	1.0	2.0	11.9	23	K53	370
APR 10...	0930	17002	17002	1130	726	8.10	6.0	7.1	13.3	40	K100	330
MAY 05...	1230	17002	17002	640	755	8.20	13.5	20	9.7	43	200	320
JUN 13...	1508	17002	17002	420	769	8.30	22.0	5.8	9.9	48	--	310

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 27...	290	54	50	43	41	51	48	4.2	3.8	52	90	286
DEC 07...	350	82	74	46	41	45	41	3.2	2.7	86	73	319
JAN 05...	390	80	80	47	47	54	55	3.5	3.6	95	99	380
FEB 14...	370	80	78	43	42	53	52	3.6	3.4	90	96	363
APR 10...	330	74	71	38	37	34	34	1.7	0.92	82	59	285
MAY 05...	320	68	61	42	40	42	41	2.9	2.3	87	75	308
JUN 13...	310	63	60	40	39	45	45	4.1	3.4	75	82	306

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05551000 FOX RIVER AT SOUTH ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)
OCT 27...	23	16	1.20	0.380	0.007	2.0	2.4	3.6	0.310	0.160	230
DEC 07...	14	4	2.50	0.090	<0.001	1.8	1.9	4.4	0.190	0.040	110
JAN 05...	7	7	2.40	0.680	0.002	1.6	2.3	4.7	0.230	0.130	60
FEB 14...	6	3	2.40	0.650	0.006	0.95	1.6	4.0	0.170	0.100	100
APR 10...	25	13	2.20	0.120	0.002	2.0	2.1	4.3	0.150	0.030	530
MAY 05...	48	21	0.800	0.230	0.009	2.7	2.9	3.7	0.300	0.050	1100
JUN 13...	33	20	0.600	0.230	0.020	1.9	2.1	2.7	0.290	0.090	580

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT 27...	160	70	67	<0.5	<0.5	80	70	<3	<3	<5	<5
DEC 07...	<50	50	45	<0.5	<0.5	90	80	<3	<3	<5	<5
JAN 05...	<50	60	56	<0.5	<0.5	100	--	<3	<3	<5	<5
FEB 14...	50	90	82	<0.5	<0.5	80	70	<3	<3	6	5
APR 10...	390	60	51	<0.5	<0.5	50	50	<3	<3	<5	<5
MAY 05...	820	80	64	<1.0	<1	70	70	<3	<3	5	<5
JUN 13...	370	100	88	<0.5	<0.5	80	80	<3	<3	<5	<5

05551000 FOX RIVER AT SOUTH ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT 27...	<5	<5	<5	<5	230	59	<5	<5	29	<5	<5
DEC 07...	<5	<5	<5	<5	220	<50	<5	<5	23	<5	<5
JAN 05...	<5	<5	<5	<5	110	<50	<5	<5	17	<5	<5
FEB 14...	<5	<5	12	<5	150	59	<5	<5	18	11	5
APR 10...	<5	<5	<5	<5	330	<50	<5	<5	56	<5	<5
MAY 05...	<5	<5	<5	<5	640	<50	<5	<5	98	5	<5
JUN 13...	<5	<5	<5	<5	590	55	<5	<5	64	<5	8

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 27...	<5	<3	<3.0	630	590	<5	<5	<50	<50	44	<1
DEC 07...	<5	<3	<3.0	880	800	<5	<5	<50	<50	14	3
JAN 05...	<5	<3	<3.0	920	--	<5	<5	<50	<50	10	1
FEB 14...	<5	<3	<3.0	1000	990	<5	<5	<100	<100	9.5	<1
APR 10...	5	<3	<3.0	680	660	<5	<5	<50	<50	12	<1
MAY 05...	<5	<3	<3.0	640	600	<5	<5	<50	<50	16	<1
JUN 13...	<5	<3	<3.0	570	560	<5	<5	<50	<50	13	<1

05551200 FERSON CREEK NEAR ST. CHARLES, IL

LOCATION.--Lat 41°56'00", long 88°20'30", in NE1/4SE1/4 sec.20, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on right bank at upstream side of bridge on Randall Road, 2.4 mi northwest of St. Charles, and at mile 2.2.

DRAINAGE AREA.--51.7 mi^2.

PERIOD OF RECORD.--December 1960 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-82-2: 1966(M), 1968(M), 1970-71(M), 1973(M), 1978-79(M).

GAGE.--Water-stage recorder. Datum of gage is 704.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--28 years (water years 1962-89), 40.7 ft^3/s, 10.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,970 ft^3/s, Feb. 20, 1971, gage height, 7.64 ft; maximum gage height, 9.66 ft, Feb. 8, 1965, from floodmark (ice jam); minimum discharge, 0.1 ft^3/s on several days in 1961, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 4	1700	*407	*4.12				

Minimum discharge, 2.4 ft^3/s, July 11-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.8	24	e20	43	e8.5	36	13	46	4.5	15	147
2	3.6	5.7	22	e11	e30	e8.0	32	12	51	4.2	9.9	112
3	3.8	5.7	22	e10	e25	e8.5	32	12	35	4.1	9.4	66
4	3.8	14	21	e9.5	e24	e12	31	10	36	3.9	258	48
5	3.8	29	21	e11	e30	e60	30	10	30	3.8	305	35
6	3.8	26	20	12	e28	e37	29	11	22	3.7	159	181
7	3.5	17	20	20	e26	e30	26	10	16	3.3	96	221
8	3.2	12	18	77	e24	e27	25	9.8	12	3.2	69	121
9	3.2	12	15	e50	e23	e35	25	9.1	11	3.0	51	96
10	3.2	53	14	e25	e21	108	23	7.9	10	2.7	42	87
11	3.2	42	e13	26	e19	118	21	7.2	9.0	2.4	35	66
12	3.1	35	e13	68	e20	69	21	6.6	11	3.3	29	53
13	2.8	45	14	37	e22	66	20	6.5	16	6.4	26	54
14	2.8	41	13	26	e18	60	18	6.5	14	4.6	26	63
15	2.8	35	e12	e21	e15	59	17	6.5	13	4.0	26	57
16	2.8	85	e12	19	e13	53	17	6.4	12	3.8	26	48
17	6.0	69	e11	18	e11	44	17	5.9	11	3.5	24	38
18	27	48	e11	17	e10	52	17	5.7	6.0	3.4	19	35
19	14	40	e12	18	e10	44	16	5.7	6.0	10	18	30
20	11	41	13	20	e12	41	16	8.1	23	16	[illegible]	26
21	10	40	12	26	e12	40	16	8.4	15	27	16	25
22	10	31	11	17	e11	38	16	6.5	10	30	15	25
23	10	28	14	16	e10	35	15	6.4	6.9	19	13	22
24	15	28	15	16	e9.5	34	14	6.0	19	15	12	17
25	11	26	13	16	e10	34	14	6.9	14	12	11	17
26	9.9	28	23	40	e10	34	13	9.3	9.4	10	11	15
27	8.1	33	22	34	e9.5	34	13	8.4	6.9	9.9	11	14
28	6.1	32	e30	28	e9.0	38	11	5.7	6.2	9.7	17	11
29	6.1	28	e37	36	---	45	14	5.3	5.8	9.6	23	11
30	6.0	27	e20	44	---	44	14	5.6	5.0	33	17	11
31	5.9	---	e23	44	---	42	---	5.5	---	28	13	---
TOTAL	209.0	962.2	541	832.5	505.0	1378.0	609	243.9	488.2	297.0	1420.3	1752
MEAN	6.74	32.1	17.5	26.9	18.0	44.5	20.3	7.87	16.3	9.58	45.8	58.4
MAX	27	85	37	77	43	118	36	13	51	33	305	221
MIN	2.8	5.7	11	9.5	9.0	8.0	11	5.3	5.0	2.4	9.4	11
CFSM	.13	.62	.34	.52	.35	.86	.39	.15	.31	.19	.89	1.13
IN.	.15	.69	.39	.60	.36	.99	.44	.18	.35	.21	1.02	1.26

CAL YR 1988 TOTAL 12462.5 MEAN 34.1 MAX 540 MIN 1.5 CFSM .66 IN. 8.97
WTR YR 1989 TOTAL 9238.1 MEAN 25.3 MAX 305 MIN 2.4 CFSM .49 IN. 6.65

e Estimated

05551540 FOX RIVER AT MONTGOMERY, IL

LOCATION.--Lat 41°43'46", long 88°20'19", in SE1/4 sec.33, T.38 N., R.8 E., Kane County, Hydrologic Unit 07120007, at bridge on Mill Street, 0.2 mi east of Montgomery, 3.2 mi upstream from Waubansee Creek, and at mile 45.9.

DRAINAGE AREA.--1,732 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964, 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 38.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
27...	1145	17002	17002	495	775	7.60	6.5	8.8	12.0	39	410
DEC											
14...	1145	17002	17002	660	940	8.40	0.0	4.1	14.3	36	200
JAN											
25...	0900	17002	17002	695	955	7.90	2.5	2.5	12.7	16	K33
FEB											
23...	1330	17002	17002	620	875	8.40	0.0	2.6	14.0	20	K10
APR											
13...	1230	17002	17002	777	767	8.50	7.5	7.1	14.8	36	210
MAY											
31...	1200	17002	17002	315	876	8.20	23.5	5.4	9.8	42	180
JUN											
28...	1230	17002	17002	300	852	7.90	26.0	14	8.1	37	300

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT											
27...	310	86	61	56	44	42	53	52	4.7	4.5	228
DEC											
14...	400	140	84	84	45	45	49	49	3.3	3.2	256
JAN											
25...	370	110	77	77	42	42	52	--	3.5	3.7	256
FEB											
23...	430	160	95	92	51	49	73	67	4.7	4.3	272
APR											
13...	330	110	72	69	38	38	39	39	2.7	2.4	216
MAY											
31...	340	110	66	63	43	43	55	55	4.1	3.9	224
JUN											
28...	300	91	57	55	39	39	57	57	4.4	4.8	208

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05551540 FOX RIVER AT MONTGOMERY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 27...	51	93	0.4	436	27	18	1.30	0.150	<0.001	1.8	2.0
DEC 14...	96	86	0.3	518	11	6	3.10	0.060	0.001	1.8	1.9
JAN 25...	95	100	0.3	--	11	5	2.50	0.240	0.002	0.96	1.2
FEB 23...	90	110	0.4	580	4	1	2.70	0.500	0.011	1.0	1.5
APR 13...	84	69	0.3	432	34	10	1.80	0.040	0.002	1.9	1.9
MAY 31...	100	110	0.5	510	44	22	0.500	0.330	0.026	2.1	2.4
JUN 28...	68	98	0.4	447	34	19	0.400	0.220	0.011	2.0	2.2

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT 27...	3.3	0.280	0.150	420	160	2	100	80	<0.5	<0.5
DEC 14...	5.0	0.220	0.030	90	<50	1	60	58	<0.5	<0.5
JAN 25...	3.7	0.190	0.110	110	80	1	70	75	<0.5	<0.5
FEB 23...	4.2	0.250	0.210	230	210	1	40	37	<0.5	<0.5
APR 13...	3.7	0.210	0.040	820	700	2	60	54	<1.0	<0.5
MAY 31...	2.9	0.370	0.230	690	380	2	100	88	<0.5	<0.5
JUN 28...	2.6	0.500	0.330	280	80	3	90	80	<0.5	<0.5

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 27...	100	90	<3	<3	5	<5	<5	<5	<5	<5
DEC 14...	100	100	<3	<3	<5	<5	<5	<5	<5	<5
JAN 25...	90	90	<3	<3	8	<5	<5	<5	<5	--
FEB 23...	100	90	<3	<3	<5	<5	<5	<5	<5	<5
APR 13...	70	70	<3	<3	<5	<5	<5	<5	<5	<5
MAY 31...	110	--	<3	<3	6	<5	<5	<5	<5	<5
JUN 28...	120	110	<3	<3	<5	<5	<5	<5	<5	<5

05551540 FOX RIVER AT MONTGOMERY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)
OCT 27...	910	<50	9	<5	96	<5	<0.05	8	<5	<3
DEC 14...	190	<50	<5	<5	23	10	0.07	<5	<5	<3
JAN 25...	170	50	<5	<5	29	19	<0.05	6	<5	<3
FEB 23...	130	93	<5	<5	22	20	<0.05	<5	<5	<3
APR 13...	410	<50	<5	<5	61	6	<0.05	<5	<5	<3
MAY 31...	600	<50	<5	<5	110	<5	<0.05	5	<5	<3
JUN 28...	480	<50	<5	<5	110	<5	<0.05	9	6	<3

DATE	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT 27...	<3.0	600	570	<5	<5	<50	<50	<0.005	5	1
DEC 14...	<3.0	870	850	<5	<5	<50	<50	<0.005	5	<1
JAN 25...	<3.0	740	760	<5	<5	<50	<100	<0.005	4	<1
FEB 23...	<5.0	950	880	<5	<5	<50	<50	<0.005	4	<1
APR 13...	<3.0	600	590	<5	<5	<50	<100	<0.005	5	<1
MAY 31...	<3.0	600	590	<5	<5	<50	<50	<0.005	5	<1
JUN 28...	<3.0	540	530	<5	<5	<50	<50	<0.005	6	--

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL

LOCATION.--Lat 41°40'18", long 88°26'29", in SE1/4NW1/4 sec.21, T.37 N., R.7 E., Kendall County, Hydrologic Unit 07120007, on right bank 300 ft upstream from bridge on State Highway 47, 2.0 mi north of Yorkville and at mile 3.3.

DRAINAGE AREA.--70.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 612.34 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--29 years, 52.4 ft^3/s, 10.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,060 ft^3/s, July 3, 1983, gage height, 9.91 ft; minimum, 0.1 ft^3/s, Dec. 7, 1962, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 240 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 31	0015	*188	*5.07				

Minimum discharge, 4.6 ft^3/s, Oct. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	12	27	e25	45	e17	40	19	118	12	71	74
2	8.7	12	26	e22	42	e17	45	18	136	11	46	95
3	9.4	12	25	e20	36	e18	48	18	96	11	34	62
4	8.0	22	24	e19	24	e25	45	18	89	10	28	42
5	6.6	44	23	e18	e22	e70	41	20	64	10	57	32
6	6.3	30	23	e19	e32	e55	39	19	49	9.7	74	40
7	7.0	25	22	36	e29	e45	36	18	39	9.3	48	92
8	6.3	21	21	110	e28	e41	33	17	33	8.5	35	80
9	6.3	23	19	78	e26	e40	29	18	29	8.3	28	70
10	6.0	40	19	e60	e25	e67	27	17	27	8.3	24	92
11	5.8	44	17	51	e26	114	26	16	25	9.7	21	70
12	8.5	37	20	55	e27	91	25	16	30	15	20	53
13	5.8	41	20	58	e25	69	25	16	36	15	17	47
14	6.6	41	20	41	e26	63	25	16	32	11	18	53
15	6.6	35	17	35	e24	71	25	16	27	9.9	18	50
16	6.8	75	15	33	e23	71	24	16	25	9.9	18	41
17	10	79	19	31	e22	59	24	16	24	9.3	17	34
18	44	56	18	30	e22	58	27	15	22	9.2	17	28
19	26	48	18	30	e22	54	26	16	20	22	15	25
20	17	50	21	31	e24	49	24	17	19	28	14	23
21	14	42	19	30	e22	48	23	17	17	25	14	21
22	13	37	19	28	e20	43	22	16	16	31	14	20
23	18	32	24	27	e19	40	22	15	16	23	19	22
24	19	29	24	27	e20	38	21	15	15	19	19	19
25	18	27	21	27	e22	38	21	19	15	17	20	19
26	15	29	18	30	e21	37	20	18	14	15	21	18
27	13	33	29	33	e20	37	20	17	15	14	23	16
28	12	35	56	31	e18	41	20	15	15	13	26	16
29	13	31	46	31	---	50	21	15	14	12	32	15
30	13	29	e35	43	---	53	20	15	13	88	33	15
31	12	---	e28	48	---	45	---	15	---	136	31	---
TOTAL	367.8	1071	733	1157	712	1564	844	519	1090	630.1	872	1284
MEAN	11.9	35.7	23.6	37.3	25.4	50.5	28.1	16.7	36.3	20.3	28.1	42.8
MAX	44	79	56	110	45	114	48	20	136	136	74	95
MIN	5.8	12	15	18	18	17	20	15	13	8.3	14	15
CFSM	.17	.51	.34	.53	.36	.72	.40	.24	.52	.29	.40	.61
IN.	.19	.57	.39	.61	.38	.83	.45	.28	.58	.33	.46	.68

CAL YR 1988 TOTAL 16707.0 MEAN 45.6 MAX 401 MIN 4.8 CFSM .65 IN. 8.85
WTR YR 1989 TOTAL 10843.9 MEAN 29.7 MAX 136 MIN 5.8 CFSM .42 IN. 5.75

e Estimated

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
27...	1030	17002	17002	14	861	7.10	6.5	4.3	10.9	14	140
DEC											
14...	1030	17002	17002	20	908	7.90	1.0	2.0	13.4	9	K130
JAN											
26...	1100	17002	17002	28	810	7.80	3.5	2.7	13.4	6	K20
FEB											
23...	1130	17002	17002	19	783	8.30	0.0	4.0	14.0	10	K10
APR											
13...	1030	17002	17002	25	839	8.00	6.5	5.5	13.4	7	K70
MAY											
31...	0930	17002	17002	15	879	8.20	22.0	3.3	6.8	16	460
JUN											
28...	1100	17002	17002	15	885	7.60	21.5	9.4	7.0	13	K1300

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT											
27...	450	450	100	100	47	47	24	25	2.8	2.9	8
DEC											
14...	450	450	100	100	49	48	25	24	1.6	1.6	1
JAN											
26...	400	400	92	90	43	43	23	22	1.6	1.6	8
FEB											
23...	480	480	110	100	54	52	35	33	2.1	2.1	8
APR											
13...	420	420	94	91	49	47	24	23	0.4	1.0	6
MAY											
31...	430	430	91	92	48	49	26	26	0.9	1.6	40
JUN											
28...	430	430	93	93	46	47	24	24	1.3	1.0	33

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT											
27...	5	1.50	0.040	<0.001	0.56	0.60	2.1	0.070	0.050	370	170
DEC											
14...	1	1.90	0.060	<0.001	0.44	0.50	2.4	0.040	0.020	210	50
JAN											
26...	6	2.10	0.050	<0.001	0.55	0.60	2.7	0.040	0.040	90	70
FEB											
23...	1	2.40	0.040	<0.001	0.36	0.40	2.8	0.050	0.050	440	270
APR											
13...	3	2.60	0.020	<0.001	0.48	0.50	3.1	0.040	0.020	860	740
MAY											
31...	12	1.10	0.210	0.015	0.69	0.90	2.0	0.100	0.050	930	380
JUN											
28...	11	2.20	0.080	0.001	0.62	0.70	2.9	0.110	0.070	710	90

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
OCT										
27...	70	67	<0.5	<0.5	<50	--	<3	<3	6	6
DEC										
14...	50	41	<0.5	<0.5	50	--	<3	<3	<5	<5
JAN										
26...	60	53	<0.5	<0.5	<50	<50	<3	<3	<5	<5
FEB										
23...	20	17	<0.5	<0.5	<50	50	<3	<3	<5	5
APR										
13...	70	66	<0.5	<0.5	<50	<50	<3	<3	5	<5
MAY										
31...	80	74	<0.5	<0.5	60	<50	<3	<3	5	<5
JUN										
28...	90	86	<0.5	<0.5	<50	<50	<3	<3	<5	<5

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
27...	<5	<5	<5	<5	460	56	<5	<5	75	56
DEC										
14...	<5	<5	<5	<5	480	<50	<5	<5	55	34
JAN										
26...	<5	<5	<5	<5	270	<50	<5	<5	65	55
FEB										
23...	<5	<5	<5	<5	450	330	<5	<5	69	61
APR										
13...	<5	<5	<5	<5	430	<50	<5	<5	130	110
MAY										
31...	<5	<5	<5	<5	1100	71	<5	<5	180	78
JUN										
28...	<5	<5	<5	<5	1200	<50	<5	<5	120	28

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
27...	<5	<5	<3	<3.0	200	200	<5	<5	<50	<50
DEC										
14...	<5	<5	<3	<3.0	210	200	<5	<5	<50	<50
JAN										
26...	<5	<5	<3	<3.0	170	160	<5	<5	<50	<50
FEB										
23...	<5	<5	<3	<5.0	180	170	<5	<5	<100	<100
APR										
13...	<5	<5	<3	<3.0	170	170	<5	<5	<50	<50
MAY										
31...	<5	<5	<3	<3.0	180	--	<5	<5	<50	<50
JUN										
28...	6	<5	<3	<3.0	170	170	<5	5	<50	<50

05552500 FOX RIVER AT DAYTON, IL

LOCATION.--Lat 41°23'12", long 88°47'26", in SW1/4SE1/4 sec.29, T.34 N., R.4 E., La Salle County, Hydrologic Unit 07120007, on right bank at upstream side of county road bridge on property of the Dayton Hydro-Electric Co. in Dayton, and at mile 5.3.

DRAINAGE AREA.--2,642 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 730: 1931. WSP 1208: 1930, 1935, 1939. WSP 1308: 1916(M), 1922(M), 1926-31(M), 1934-40(M), 1946-47(M). WDR IL-75-1: Drainage area. WDR IL-76-1: 1969.

GAGE.--Water-stage recorder. Datum of gage is 462.30 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 13, 1925, nonrecording gage at site 4.1 mi upstream at datum 496.80 ft above Memphis datum. Apr. 13, 1925, to Sept. 30, 1942, nonrecording gage at site 500 ft upstream at datum 7.70 ft below NGVD. Apr. 11, 1951, to Sept. 30, 1978, water-stage recorder, and Oct. 1, 1942, to Apr. 10, 1951, nonrecording gage at site 500 ft upstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--74 years (water years 1916-89), 1,738 ft^3/s, 8.93 in/yr, discharge for site at Wedron adjusted for difference in drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,100 ft^3/s, Oct. 11, 1954, gage height, 24.63 ft, from rating curve extended above 15,000 ft^3/s on basis of computation of peak flow over dam; maximum gage height, 36.47 ft, Jan. 25, 1960, ice jam; minimum daily discharge, 1.0 ft^3/s, Aug. 29, 1934, when turbines were shut down; minimum daily with plant operating, 78 ft^3/s, Oct. 29, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1915	*7,070	*10.61				

Minimum daily discharge, 242 ft^3/s, Feb. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	561	638	1480	1060	1180	e950	2180	1160	3870	445	2130	2890
2	559	652	1460	1010	1210	e900	2130	1130	5220	435	1730	3680
3	638	657	1410	851	1100	e950	2120	1130	3360	311	1590	2930
4	576	692	1450	877	705	e1500	2080	1230	2790	479	1480	2780
5	543	1340	1150	803	242	4230	1990	1120	2260	331	3460	2710
6	535	1250	1140	1120	632	4100	1960	983	1940	404	3660	4150
7	530	1170	1140	1260	e1800	2720	1930	873	1640	372	3330	5380
8	531	1180	1130	e1100	e1700	2030	1880	986	1420	316	3050	4390
9	497	1090	962	e1150	e1500	1800	1770	954	1250	328	2610	3920
10	489	1440	944	e1350	e1200	2150	1630	886	1090	330	2200	4040
11	486	1570	769	e1630	e1150	2750	1560	786	954	311	1750	3570
12	482	1420	425	e1600	e1200	2480	1330	733	1050	397	1490	3050
13	493	1560	964	e1450	e1200	2150	1050	638	1440	739	1370	2800
14	482	1550	1210	e1300	e1150	2070	991	643	1110	423	1370	2860
15	466	1580	868	e1150	e1100	2330	732	612	1010	419	1410	2730
16	489	2210	523	1180	e1040	2420	725	588	973	359	1140	2520
17	352	2440	548	1070	e1020	2300	643	647	891	367	1040	2270
18	1080	2010	855	1100	e1000	2430	567	556	846	335	984	1990
19	988	1960	994	1050	e1050	2250	557	620	700	585	916	1930
20	577	2140	1180	1040	e1050	2120	580	592	744	1250	939	1770
21	601	2090	961	1040	e1050	2080	424	637	663	1210	789	1560
22	700	1970	799	999	e1030	2000	545	618	783	1270	768	1400
23	801	1880	928	997	e1000	1930	482	542	581	1070	768	1280
24	907	1730	937	952	e950	1900	474	572	521	849	717	1090
25	852	1510	837	923	e1000	1870	418	756	579	804	615	1010
26	796	1550	789	936	e1100	1860	544	1210	507	706	699	1010
27	768	1680	939	1030	e1050	1810	685	781	621	729	551	849
28	569	1610	1170	1010	e1000	1850	975	685	790	712	578	813
29	654	1500	1050	1010	---	2040	1060	644	508	659	678	691
30	651	1460	1070	1130	---	2090	1170	636	476	1500	758	644
31	691	---	980	1220	---	2180	---	625	---	3050	903	---
TOTAL	19344	45529	31062	34398	30409	66240	35182	24573	40587	21495	45473	72707
MEAN	624	1518	1002	1110	1086	2137	1173	793	1353	693	1467	2424
MAX	1080	2440	1480	1630	1800	4230	2180	1230	5220	3050	3660	5380
MIN	352	638	425	803	242	900	418	542	476	311	551	644
CFSM	.24	.57	.38	.42	.41	.81	.44	.30	.51	.26	.56	.92
IN.	.27	.64	.44	.48	.43	.93	.50	.35	.57	.30	.64	1.02

CAL YR 1988 TOTAL 603726 MEAN 1650 MAX 11500 MIN 209 CFSM .62 IN. 8.50
WTR YR 1989 TOTAL 466999 MEAN 1279 MAX 5380 MIN 242 CFSM .48 IN. 6.58

e Estimated

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC- ITY, MEAN (F/S) (00055)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT												
11...	1600	81700	17002	8	180	E1.50	4.71	95	832	8.70	13.0	14.0
11...	1601	81700	80020	8	180	E1.50	4.71	95	822	8.76	13.0	--
NOV												
07...	1600	81700	17002	11	275	E1.50	6.59	1280	783	8.30	5.0	5.5
07...	1601	81700	80020	11	275	E1.50	6.59	1280	771	8.54	5.0	--
DEC												
06...	1500	81700	17002	10	275	E2.00	6.66	1340	813	9.70	14.0	2.5
06...	1501	81700	80020	10	275	E2.00	6.66	1340	785	8.93	14.0	--
JAN												
10...	1530	81700	17002	10	260	E1.50	6.70	E1350	876	9.30	1.0	-0.5
10...	1531	81700	80020	10	260	E1.50	6.70	E1350	859	7.82	1.0	--
FEB												
06...	1415	81700	17002	9	155	E1.00	4.92	183	894	7.80	-7.0	0.5
06...	1416	81700	80020	9	155	E1.00	4.92	183	865	8.61	-7.0	--
MAR												
07...	1330	81700	17002	10	280	E1.50	7.82	2580	862	7.50	2.0	0.5
07...	1331	81700	80020	10	280	E1.50	7.82	2580	890	8.18	2.0	--
21...	1530	81700	80020	9	280	E3.50	7.49	2190	768	7.77	--	--
APR												
04...	1325	81700	17002	10	280	E2.50	7.42	2120	749	8.70	12.0	9.0
04...	1326	81700	80020	10	280	E2.50	7.42	2120	746	8.75	12.0	--
MAY												
10...	1415	81700	17002	9	300	E3.50	6.11	958	740	8.90	25.0	15.5
10...	1416	81700	80020	9	300	E3.50	6.11	958	720	9.24	25.0	--
JUN												
05...	1445	81700	17002	11	285	E2.50	7.61	2330	714	8.00	27.0	20.0
05...	1446	81700	80020	11	285	E2.50	7.61	2330	691	8.31	27.0	--
JUL												
10...	1530	81700	17002	9	200	E1.00	4.99	234	783	8.80	36.0	32.0
10...	1531	81700	80020	9	200	E1.00	5.03	234	719	9.23	36.0	--
AUG												
08...	1525	81700	17002	11	285	E3.00	8.14	2990	702	8.20	26.0	22.5
08...	1526	81700	80020	11	285	E3.00	8.14	2990	692	8.54	26.0	--
30...	1346	81700	80020	12	250	E2.00	5.93	747	762	9.11	30.0	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	E.COLI MTEC,MF WATER WHOLE TOTAL (COL / 100 ML) (31648)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)
OCT											
11...	7.3	12.5	28	--	--	350	85	0	63	64	44
11...	--	--	--	30	--	--	--	0	--	--	--
NOV											
07...	10	12.0	32	--	--	300	65	0	63	56	40
07...	--	--	--	K160	--	--	--	0	--	--	--
DEC											
06...	3.9	16.0	31	--	--	370	110	<0.1	82	78	43
06...	--	--	--	--	--	--	--	0	--	--	--
JAN											
10...	13	12.9	19	--	--	340	110	0	76	75	39
10...	--	--	--	--	--	--	--	0	--	--	--
FEB											
06...	3.4	14.5	10	--	--	380	100	0	84	82	44
06...	--	--	--	28	K33	--	--	0	--	--	--
MAR											
07...	12	14.0	19	--	--	340	89	7.0	77	75	39
07...	--	--	--	K71	168	--	--	7.0	--	--	--
21...	--	--	--	28	--	--	--	--	--	--	--
APR											
04...	21	11.4	38	--	--	340	110	0	80	73	38
04...	--	--	--	91	143	--	--	0	--	--	--
MAY											
10...	13	18.9	61	--	--	320	120	0	62	56	44
10...	--	--	--	K37	K31	--	--	0	--	--	--
JUN											
05...	11	8.6	38	--	--	310	110	0	75	68	36
05...	--	--	--	650	K380	300	300	0	--	67	--
JUL											
10...	36	11.5	74	--	--	250	90	0	41	34	42
10...	--	--	--	K17	K10	--	--	0	--	--	--
AUG											
08...	36	8.2	65	--	--	280	94	0	70	56	35
08...	--	--	--	330	310	--	--	0	--	--	--
30...	--	--	--	51	40	--	--	0	--	--	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE (MG/L AS SO4) (00946)
OCT											
11...	45	59	--	4.6	4.7	--	--	--	--	260	60
11...	--	--	--	--	--	0	306	260	251	--	--
NOV											
07...	38	48	46	4.4	3.9	--	--	--	--	232	--
07...	--	--	--	--	--	60	159	230	230	--	--
DEC											
06...	42	42	42	3.7	3.4	--	--	--	--	261	--
06...	--	--	--	--	--	0	316	260	259	--	--
JAN											
10...	38	56	54	3.7	3.5	--	--	--	--	238	--
10...	--	--	--	--	--	60	168	240	238	--	--
FEB											
06...	43	45	44	3.2	3.0	--	--	--	--	279	--
06...	--	--	--	--	--	0	340	280	279	--	--
MAR											
07...	38	55	--	3.7	3.8	--	--	--	--	255	--
07...	--	--	--	--	--	0	312	250	256	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	37	35	34	2.0	1.7	--	--	--	--	221	--
04...	--	--	--	--	--	0	270	220	221	--	--
MAY											
10...	43	47	47	1.3	1.6	--	--	--	--	198	85
10...	--	--	--	--	--	0	240	200	197	--	--
JUN											
05...	34	27	27	3.3	2.9	--	--	--	--	202	57
05...	33	--	28	--	2.3	0	248	200	203	--	--
JUL											
10...	40	58	57	5.5	5.3	--	--	--	--	160	72
10...	--	--	--	--	--	0	195	160	160	--	--
AUG											
08...	33	37	37	4.2	3.1	--	--	--	--	183	57
08...	--	--	--	--	--	0	121	160	181	--	--
30...	--	--	--	--	--	0	238	190	195	--	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
11...	60	97	0.5	0.52	--	--	494	--	15	6	--
11...	--	--	--	--	--	--	--	--	--	--	0.020
NOV											
07...	62	83	0.4	--	--	--	472	436	39	19	--
07...	--	--	--	--	--	0.036	--	--	--	--	0.050
DEC											
06...	98	76	0.2	--	--	--	537	508	38	13	--
06...	--	--	--	--	--	--	--	--	--	--	0.030
JAN											
10...	80	100	0.3	--	--	--	548	523	15	7	--
10...	--	--	--	--	--	--	--	--	--	--	0.050
FEB											
06...	97	83	0.4	--	--	--	550	539	1	1	--
06...	--	--	--	--	--	0.029	--	--	--	--	0.020
MAR											
07...	67	100	0.3	--	--	--	530	--	10	4	--
07...	--	--	--	--	--	--	--	--	--	--	0.040
21...	--	--	--	--	--	--	--	--	--	--	0.030
APR											
04...	78	64	0.2	--	--	--	448	433	48	10	--
04...	--	--	--	--	--	--	--	--	--	--	0.030
MAY											
10...	85	75	0.3	0.28	--	--	444	430	68	36	--
10...	--	--	--	--	--	0.020	--	--	--	--	<0.010
JUN											
05...	59	56	0.3	0.32	--	--	462	405	102	24	--
05...	57	53	--	0.30	4.6	--	432	280	--	--	0.070
JUL											
10...	72	96	0.4	0.51	--	--	452	401	119	58	--
10...	--	--	--	--	--	--	--	--	--	--	<0.010
AUG											
08...	60	70	0.3	0.28	--	--	518	379	66	52	--
08...	--	--	--	--	--	0.020	--	--	--	--	0.010
30...	--	--	--	--	--	--	--	--	--	--	<0.010

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT											
11...	1.60	1.60	0.030	0.030	0.004	--	1.4	--	0.260	0.170	--
11...	--	1.60	--	0.040	--	0.86	1.2	0.90	0.290	0.150	0.160
NOV											
07...	1.30	1.30	0.140	0.210	0.004	--	1.9	--	0.270	0.090	--
07...	--	1.50	--	0.150	--	--	1.7	<0.90	0.290	0.090	0.070
DEC											
06...	2.50	2.50	<0.100	<0.100	<0.041	--	1.8	--	0.210	<0.010	--
06...	--	2.70	--	0.020	--	0.58	1.8	0.60	0.300	<0.010	<0.010
JAN											
10...	4.80	4.70	0.390	0.370	0.046	--	1.5	--	0.250	0.160	--
10...	--	4.60	--	0.350	--	0.85	1.8	1.2	0.240	0.160	0.140
FEB											
06...	4.00	4.00	0.040	0.040	<0.001	--	1.0	--	0.180	0.120	--
06...	--	3.60	--	0.040	--	0.76	0.80	0.80	0.160	0.090	0.100
MAR											
07...	4.20	4.10	0.320	0.320	<0.001	--	1.4	--	0.260	0.190	--
07...	--	4.20	--	0.330	--	0.57	1.6	0.90	0.280	0.200	0.180
21...	--	3.80	--	0.290	--	1.0	1.5	1.3	0.170	0.090	0.070
APR											
04...	2.80	2.80	0.020	0.010	0.002	--	1.8	--	0.260	0.040	--
04...	--	2.70	--	0.020	--	0.68	1.7	0.70	0.270	0.050	0.040
MAY											
10...	0.200	0.200	0.040	0.020	0.008	--	3.2	--	0.320	0.010	--
10...	--	0.200	--	<0.010	--	--	1.1	1.0	0.260	0.030	<0.010
JUN											
05...	8.00	7.90	0.050	0.040	0.002	--	1.7	--	0.280	0.070	--
05...	--	7.80	0.040	0.040	--	1.2	2.1	1.2	0.160	0.070	0.060
JUL											
10...	<0.100	<0.100	0.050	0.050	0.019	--	2.2	--	0.420	0.080	--
10...	--	<0.100	--	0.020	--	0.58	1.6	0.60	0.170	0.050	0.060
AUG											
08...	2.10	2.10	0.040	0.040	0.003	--	1.9	--	0.430	0.120	--
08...	--	2.20	--	0.020	--	0.38	2.7	0.40	0.410	0.100	0.090
30...	--	<0.100	--	0.020	--	0.68	2.2	0.70	0.340	0.100	0.090

ILLINOIS RIVER BASIN

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT											
11...	160	<50	--	2	2	80	82	<0.5	<0.5	140	--
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
07...	570	140	--	2	1	80	65	<0.5	<0.5	100	90
07...	--	--	<1	--	--	--	--	--	--	--	--
DEC											
06...	220	100	--	1	<1	70	64	<0.5	<0.5	80	90
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	270	50	--	1	<1	60	59	<0.5	<0.5	80	70
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	290	60	--	<1	1	70	69	<0.5	<0.5	90	90
06...	--	--	<1	--	--	--	--	--	--	--	--
MAR											
07...	310	90	--	<1	<1	30	29	<0.5	<0.5	80	80
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	700	170	--	1	<1	70	60	<0.5	<0.5	70	60
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	560	--	--	2	1	70	62	<1.0	<2	100	100
10...	--	--	<1	--	--	--	--	--	--	--	--
JUN											
05...	2700	300	--	2	1	100	80	<0.5	<0.5	80	70
05...	1600	<10	--	--	--	100	75	<10	<0.5	80	80
JUL											
10...	1300	100	--	4	4	70	48	<0.5	<0.5	160	150
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	1700	70	--	3	2	100	81	<0.5	<0.5	80	80
08...	--	--	1	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT											
11...	0.19	0.66	90	10	<5	<5	<5	5	360	<50	<5
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
07...	0.19	0.18	6	--	<5	<5	<5	<5	710	<50	6
07...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	0.4	0.2	<5	<5	<5	<5	<5	<5	510	<50	5
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	0.2	0.3	<5	--	<5	<5	<5	<5	500	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	0.5	0.2	11	--	<5	<5	<5	<5	130	<50	<5
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	0.1	<0.1	<5	<5	<5	<5	<5	<5	400	<50	<5
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	0.1	<0.1	7	5	<5	<5	<5	<5	900	<50	<5
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	0.2	0.2	<5	<5	<5	<5	5	<5	580	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
JUN											
05...	0.1	0.1	12	6	<5	<5	5	<5	2700	<50	10
05...	<1	<1	4	<5	--	<3	<10	<10	2300	8	6
JUL											
10...	<0.1	<0.1	<5	--	<5	<5	<5	<5	1600	<50	<5
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	0.4	<0.1	<5	<5	<5	<5	7	<5	2600	<50	12
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

ILLINOIS RIVER BASIN

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT											
11...	<5	37	<5	<0.05	<0.05	--	11	5	<1	<3	<3.0
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
07...	<5	51	6	--	<0.05	--	5	<5	<1	<3	<3.0
07...	--	--	--	--	--	4	--	--	--	--	--
DEC											
06...	<5	38	6	--	--	--	<5	<5	<1	<3	<3.0
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	<5	24	6	--	--	--	<5	<5	1	<3	<3.0
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	<5	26	17	--	--	--	9	10	<1	<3	<3.0
06...	--	--	--	--	--	3	--	--	--	--	--
MAR											
07...	<5	33	15	--	--	--	6	<5	<1	<3	<3.0
07...	--	--	--	E0.05	E0.05	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	<5	87	<5	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	<5	96	5	<0.05	<0.05	--	<5	<5	<1	<3	<3.0
10...	--	--	--	--	--	3	--	--	--	--	--
JUN											
05...	<5	110	<5	--	--	--	14	10	1	<3	<3.0
05...	<10	140	2	<0.10	<0.05	<10	6	<10	--	<1	<1.0
JUL											
10...	<5	170	<5	--	--	--	9	5	<1	<3	<3.0
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	<5	150	<5	--	--	--	<5	<5	<1	<3	<3.0
08...	--	--	--	--	--	3	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)
OCT											
11...	480	--	<5	<5	<100	<100	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
NOV											
07...	560	520	<5	<5	<50	<50	--	--	--	--	--
07...	--	--	--	--	--	--	1.1	0.8	8.8	1.4	6.2
DEC											
06...	680	660	<5	<5	<50	<50	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	490	470	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
06...	540	540	<5	<5	<100	<100	--	--	--	--	--
06...	--	--	--	--	--	--	2.1	<0.4	5.6	<0.4	3.8
MAR											
07...	540	--	<5	<5	<50	<50	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	580	550	<5	<5	<50	<50	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	520	500	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	1.8	1.2	6.6	1.1	5.3
JUN											
05...	300	280	8	<5	<50	<50	--	--	--	--	--
05...	--	290	--	<6	30	15	--	--	--	--	--
JUL											
10...	380	350	<5	<5	<50	<50	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	500	460	5	<5	<100	<100	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
11...	--	11	--	--	1.0	<0.005	5	<1	--	--	--
11...	--	--	7.4	1.2	--	--	--	--	14	3.6	99
NOV											
07...	--	12	--	--	1.0	<0.005	4	1	--	--	--
07...	1.4	--	5.9	2.8	--	--	--	--	34	118	96
DEC											
06...	--	12	--	--	<0.005	<0.005	<5	1	--	--	--
06...	--	--	5.6	3.6	--	--	--	--	32	116	98
JAN											
10...	--	8.1	--	--	4.0	<0.005	4	<1	--	--	--
10...	--	--	5.2	1.3	--	--	--	--	17	0.0	88
FEB											
06...	--	7.3	--	--	1.0	<0.005	2	<1	--	--	--
06...	<0.4	--	5.4	0.6	--	--	--	--	179	88	100
MAR											
07...	--	9.4	--	--	1.0	<0.005	4	2	--	--	--
07...	--	--	5.1	0.6	--	--	--	--	19	132	92
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	9.9	--	--	--	<0.005	3	<1	--	--	--
04...	--	--	5.6	3.4	--	--	--	--	44	252	90
MAY											
10...	--	16	--	--	2.0	<0.005	7	<1	--	--	--
10...	0.9	--	6.0	4.2	--	--	--	--	43	111	98
JUN											
05...	--	10	--	--	1.0	<0.005	5	<1	--	--	--
05...	--	10	5.2	3.5	<0.01	<0.010	--	--	106	667	99
JUL											
10...	--	18	--	--	<5.0	<0.005	6	<1	--	--	--
10...	--	--	7.3	>5.0	--	--	--	--	70	44	100
AUG											
08...	--	13	--	--	<5.0	<0.005	3	<1	--	--	--
08...	--	--	7.0	>5.0	--	--	--	--	150	1210	99
30...	--	--	7.5	>5.0	--	--	--	--	35	71	100

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT											
11...	1625	81700	81700	1.00	1	180	20.0	828	8.70	14.0	13.3
11...	1628	81700	81700	1.00	1	180	40.0	836	8.70	14.0	12.7
11...	1630	81700	81700	1.00	1	180	60.0	835	8.70	14.0	12.7
11...	1632	81700	81700	1.00	1	180	80.0	834	8.70	14.0	12.6
11...	1634	81700	81700	1.00	1	180	100	832	8.70	14.0	12.5
11...	1636	81700	81700	1.00	1	180	120	832	8.70	14.0	12.6
11...	1638	81700	81700	1.00	1	180	140	839	8.70	14.0	12.7
11...	1640	81700	81700	1.00	1	180	160	837	8.70	14.0	13.0
NOV											
07...	1534	81700	81700	1.00	1	275	15.0	772	8.30	6.0	12.1
07...	1538	81700	81700	1.00	1	275	40.0	781	8.30	5.5	11.9
07...	1541	81700	81700	1.00	1	275	65.0	781	8.30	5.5	12.0
07...	1543	81700	81700	1.00	1	275	90.0	782	8.00	5.5	12.0
07...	1546	81700	81700	1.00	1	275	115	781	8.20	5.5	11.9
07...	1548	81700	81700	1.00	1	275	140	783	8.30	5.5	12.0
07...	1550	81700	81700	1.00	1	275	165	783	8.30	5.5	12.0
07...	1553	81700	81700	1.00	1	275	190	781	8.20	5.5	12.0
07...	1555	81700	81700	1.00	1	275	215	782	8.20	5.5	11.9
07...	1556	81700	81700	1.00	1	275	240	783	8.30	5.5	12.1
07...	1558	81700	81700	1.00	1	275	265	783	8.20	5.5	11.9
DEC											
06...	1430	81700	81700	1.00	1	275	250	813	9.70	2.5	16.2
06...	1431	81700	81700	1.00	1	275	225	813	9.70	2.5	16.0
06...	1432	81700	81700	1.00	1	275	200	813	9.70	2.5	16.0
06...	1433	81700	81700	1.00	1	275	175	813	9.70	2.5	16.1
06...	1434	81700	81700	1.00	1	275	150	813	9.70	2.5	16.0
06...	1435	81700	81700	1.00	1	275	125	813	9.70	2.5	16.0
06...	1436	81700	81700	1.00	1	275	100	813	9.80	2.5	16.2
06...	1437	81700	81700	1.00	1	275	75.0	814	9.70	2.5	16.0
06...	1438	81700	81700	1.00	1	275	50.0	813	9.70	2.5	16.0
06...	1439	81700	81700	1.00	1	275	25.0	813	9.70	2.5	15.8
JAN											
10...	1510	81700	81700	1.00	1	260	20.0	919	9.10	0.0	13.7
10...	1512	81700	81700	1.00	1	260	45.0	906	9.30	0.0	13.7
10...	1515	81700	81700	1.00	1	260	70.0	905	9.40	0.0	13.6
10...	1518	81700	81700	1.00	1	260	95.0	904	9.30	-0.5	13.6
10...	1521	81700	81700	1.00	1	260	120	888	9.40	-0.5	13.6
10...	1525	81700	81700	1.00	1	260	145	876	9.30	-0.5	12.9
10...	1528	81700	81700	1.00	1	260	170	876	9.60	-0.5	12.7
10...	1532	81700	81700	1.00	1	260	195	868	9.40	-0.5	12.8
10...	1535	81700	81700	1.00	1	260	220	877	9.50	-0.5	12.9
10...	1540	81700	81700	1.00	1	260	245	878	9.40	-0.5	13.6
FEB											
06...	1410	81700	81700	1.25	1	155	20.0	897	7.80	0.5	14.4
06...	1412	81700	81700	0.50	1	155	35.0	901	7.90	0.5	14.5
06...	1413	81700	81700	0.75	1	155	50.0	898	7.80	0.5	14.5
06...	1414	81700	81700	1.50	1	155	65.0	900	7.80	0.0	14.8
06...	1417	81700	81700	0.75	1	155	80.0	894	7.80	0.5	14.5
06...	1419	81700	81700	1.50	1	155	95.0	897	7.60	0.0	14.8
06...	1421	81700	81700	1.25	1	155	110	899	7.80	0.0	14.6
06...	1422	81700	81700	0.75	1	155	125	901	7.80	0.5	14.3
06...	1423	81700	81700	0.75	1	155	140	897	7.80	0.5	14.4

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SAM- PLING DEPTH (FEET) (00003)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR											
07...	1320	81700	81700	1.00	1	280	25.0	870	7.80	0.5	14.1
07...	1325	81700	81700	1.00	1	280	50.0	878	7.70	0.5	14.1
07...	1328	81700	81700	1.00	1	280	75.0	859	7.60	0.5	14.0
07...	1329	81700	81700	1.00	1	280	100	865	7.50	0.5	14.1
07...	1332	81700	81700	1.00	1	280	125	862	7.50	0.5	14.0
07...	1333	81700	81700	1.00	1	280	150	848	7.50	0.5	14.0
07...	1336	81700	81700	1.00	1	280	175	845	7.50	0.5	14.1
07...	1338	81700	81700	1.00	1	280	200	844	7.50	0.5	14.0
07...	1340	81700	81700	1.00	1	280	225	838	7.50	0.5	13.9
07...	1341	81700	81700	1.00	1	280	250	832	7.60	0.5	13.7
21...	1520	81700	81700	1.00	1	280	15.0	768	7.80	4.5	12.4
21...	1521	81700	81700	1.00	1	280	40.0	770	7.90	4.5	12.5
21...	1522	81700	81700	1.00	1	280	65.0	771	7.80	4.5	12.4
21...	1523	81700	81700	1.00	1	280	90.0	770	7.70	4.5	12.9
21...	1524	81700	81700	1.00	1	280	115	767	7.80	4.5	14.1
21...	1525	81700	81700	1.00	1	280	140	767	7.70	4.5	13.8
21...	1526	81700	81700	1.00	1	280	165	766	7.70	4.5	14.0
21...	1527	81700	81700	1.00	1	280	190	766	7.70	4.5	13.6
21...	1528	81700	81700	1.00	1	280	215	765	7.80	4.5	13.9
APR											
04...	1305	81700	81700	1.00	1	280	20.0	737	8.70	9.0	10.6
04...	1306	81700	81700	1.00	1	280	45.0	756	8.60	9.0	10.7
04...	1307	81700	81700	1.00	1	280	70.0	754	8.70	9.0	10.5
04...	1308	81700	81700	1.00	1	280	95.0	753	8.60	9.0	10.8
04...	1309	81700	81700	1.00	1	280	120	749	8.70	9.0	11.3
04...	1310	81700	81700	1.00	1	280	145	748	8.70	9.0	11.4
04...	1311	81700	81700	1.00	1	280	170	748	8.70	9.0	11.4
04...	1312	81700	81700	1.00	1	280	195	748	8.70	9.0	11.5
04...	1313	81700	81700	1.00	1	280	220	748	8.70	9.0	11.6
04...	1314	81700	81700	1.00	1	280	245	747	8.80	9.0	11.3
MAY											
10...	1440	81700	81700	1.00	1	300	270	732	8.90	17.0	19.9
10...	1444	81700	81700	1.00	1	300	240	735	8.90	16.0	19.0
10...	1445	81700	81700	1.00	1	300	210	740	8.90	15.5	18.9
10...	1447	81700	81700	1.00	1	300	180	739	8.90	15.5	18.7
10...	1448	81700	81700	1.00	1	300	150	740	8.90	15.5	18.9
10...	1450	81700	81700	1.00	1	300	120	740	8.90	15.5	18.8
10...	1451	81700	81700	1.00	1	300	90.0	740	8.90	15.5	18.9
10...	1452	81700	81700	1.00	1	300	60.0	740	8.90	15.5	19.1
10...	1453	81700	81700	1.00	1	300	30.0	739	8.90	15.5	19.3
JUN											
05...	1420	81700	81700	1.00	1	285	25.0	729	7.70	21.0	8.6
05...	1425	81700	81700	1.00	1	285	40.0	729	7.90	21.0	8.6
05...	1427	81700	81700	1.00	1	285	65.0	729	7.90	21.0	8.7
05...	1430	81700	81700	1.00	1	285	90.0	726	8.00	20.5	8.7
05...	1432	81700	81700	1.00	1	285	115	722	8.00	20.5	8.7
05...	1434	81700	81700	1.00	1	285	140	716	8.00	20.5	8.7
05...	1437	81700	81700	1.00	1	285	165	714	8.00	20.0	8.7
05...	1439	81700	81700	1.00	1	285	190	708	8.00	20.0	8.6
05...	1441	81700	81700	1.00	1	285	215	703	8.00	20.0	8.3
05...	1444	81700	81700	1.00	1	285	240	703	8.00	20.0	8.3
05...	1447	81700	81700	1.00	1	285	265	703	7.90	20.0	8.2
JUL											
10...	1510	81700	81700	1.00	1	200	20.0	754	8.80	32.5	12.7
10...	1511	81700	81700	1.00	1	200	40.0	756	8.80	32.5	11.9
10...	1512	81700	81700	1.00	1	200	60.0	758	8.80	32.0	11.5
10...	1513	81700	81700	1.00	1	200	80.0	760	8.90	32.0	11.5
10...	1514	81700	81700	1.00	1	200	100	761	8.80	32.0	11.3
10...	1515	81700	81700	1.00	1	200	120	761	8.80	31.5	11.4
10...	1516	81700	81700	1.00	1	200	140	758	8.80	31.5	11.4
10...	1517	81700	81700	1.00	1	200	160	761	8.80	31.5	11.2
10...	1518	81700	81700	1.00	1	200	180	761	8.80	32.0	11.3

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SAMPLING DEPTH (FEET) (00003)	NUMBER OF SAMPLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
AUG											
08...	1456	81700	81700	1.00	1	285	25.0	701	8.10	23.0	8.2
08...	1457	81700	81700	1.00	1	285	50.0	701	8.20	23.0	8.2
08...	1458	81700	81700	1.00	1	285	75.0	701	8.10	23.0	8.2
08...	1459	81700	81700	1.00	1	285	100	703	8.10	22.5	8.2
08...	1500	81700	81700	1.00	1	285	125	699	8.10	22.5	8.1
08...	1501	81700	81700	1.00	1	285	150	699	8.10	22.5	8.1
08...	1502	81700	81700	1.00	1	285	175	702	8.20	22.5	8.4
08...	1503	81700	81700	1.00	1	285	200	700	8.10	23.0	8.4
08...	1504	81700	81700	1.00	1	285	225	699	8.10	23.0	8.5
08...	1505	81700	81700	1.00	1	285	250	700	8.10	23.0	8.4
08...	1506	81700	81700	1.00	1	285	275	701	8.10	23.0	8.4
30...	1315	81700	81700	1.00	1	250	5.00	755	8.90	25.5	9.1
30...	1316	81700	81700	1.00	1	250	25.0	753	8.90	25.5	9.0
30...	1317	81700	81700	1.00	1	250	45.0	755	8.80	25.5	8.7
30...	1318	81700	81700	1.00	1	250	65.0	755	8.90	25.5	8.7
30...	1319	81700	81700	1.00	1	250	85.0	754	8.80	25.5	8.7
30...	1320	81700	81700	1.00	1	250	105	748	8.90	25.5	8.7
30...	1321	81700	81700	1.00	1	250	125	752	8.90	25.5	8.8
30...	1322	81700	81700	1.00	1	250	145	752	8.90	25.5	8.8
30...	1323	81700	81700	1.00	1	250	165	751	8.90	25.5	9.5
30...	1324	81700	81700	1.00	1	250	185	751	8.90	25.0	10.5
30...	1325	81700	81700	1.00	1	250	205	752	8.80	25.0	12.0
30...	1326	81700	81700	1.00	1	250	225	749	8.80	25.5	10.1

05554490 VERMILION RIVER AT MC DOWELL, IL

LOCATION.--Lat 40°49'42", long 88°34'29", in SW1/4 sec.6, T.27 N., R.6 E., Livingston County, Hydrologic Unit 07130002, at county road bridge, 0.3 mi east of McDowell, 0.4 mi downstream from Turtle Creek, 7.3 mi downstream from confluence of North and South Branches, and at mile 68.4.

DRAINAGE AREA.--551 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water-discharge records from Vermilion River at Pontiac (station 05554500) were used to estimate discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV											
03...	1000	17002	17002	0.0	774	8.10	7.0	--	12.4	18	K20
DEC											
15...	1000	17002	17002	46	921	8.00	4.0	7.1	16.8	9	<5
JAN											
12...	1000	17002	17002	282	663	8.00	1.0	0.20	14.1	14	K160
FEB											
16...	1000	17002	17002	30	910	8.30	0.0	0.10	17.9	7	K12
MAR											
27...	0930	17002	17002	125	733	8.30	16.0	9.2	9.8	40	K15
MAY											
03...	1000	17002	17002	128	771	8.40	13.0	10	10.5	9	K30
30...	1030	17002	17002	278	771	7.00	21.0	6.4	7.7	10	K140
JUL											
20...	0930	17002	17002	145	759	7.30	22.0	22	7.1	20	K50
AUG											
24...	1000	17002	17002	610	716	7.80	23.5	29	5.2	17	K60

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
NOV											
03...	420	210	76	73	59	58	15	14	2.4	1.9	214
DEC											
15...	460	260	93	93	54	55	32	33	4.0	3.9	202
JAN											
12...	310	180	70	71	32	32	9.7	10	1.6	1.3	125
FEB											
16...	470	250	100	100	54	53	22	22	1.7	1.6	214
MAR											
27...	340	180	76	71	41	39	14	13	1.4	1.0	159
MAY											
03...	390	200	87	84	44	43	12	12	1.1	0.95	186
30...	370	190	90	86	40	38	9.0	8.8	0.7	0.63	184
JUL											
20...	370	180	74	70	48	47	20	20	1.4	0.73	190
AUG											
24...	340	160	69	66	44	43	22	21	2.4	2.3	183

05554490 VERMILION RIVER AT MC DOWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
NOV											
03...	210	59	7	<0.100	<0.100	<0.002	0.100	0.020	1500	<50	50
DEC											
15...	240	10	3	3.30	<0.100	<0.001	0.030	0.020	180	<50	50
JAN											
12...	91	64	7	22.0	<0.100	<0.001	0.140	0.070	1700	50	60
FEB											
16...	190	3	1	14.0	<0.100	<0.002	0.060	0.060	140	<50	40
MAR											
27...	120	52	7	15.0	<0.100	<0.006	0.070	0.020	1500	100	50
MAY											
03...	110	34	4	16.0	<0.100	<0.006	0.060	0.020	1100	220	50
30...	82	53	4	23.0	0.160	<0.001	0.070	0.040	1300	210	60
JUL											
20...	170	126	16	0.110	<0.100	<0.001	0.110	0.030	1700	90	70
AUG											
24...	150	48	6	0.170	<0.100	<0.003	0.090	0.030	1000	80	70

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
NOV											
03...	39	<0.5	<0.5	110	100	<3	<3	<5	<5	<5	<5
DEC											
15...	48	<0.5	<0.5	170	170	<3	<3	<5	<5	<5	<5
JAN											
12...	43	<0.5	<0.5	50	50	<3	<3	<5	<5	<5	<5
FEB											
16...	44	<0.5	<0.5	90	90	<3	<3	<5	<5	<5	<5
MAR											
27...	44	<0.5	<0.5	90	80	<3	<3	5	<5	<5	<5
MAY											
03...	39	<0.5	<0.5	80	80	--	--	<5	<5	<5	<5
30...	53	<0.5	<0.5	70	70	<3	<3	<5	<5	<5	<5
JUL											
20...	58	<0.5	<0.5	140	140	<3	<3	8	5	<5	<5
AUG											
24...	53	<0.5	<0.5	170	160	<3	<3	<5	<5	<5	<5

05554490 VERMILION RIVER AT MC DOWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
NOV										
03...	<5	<5	2100	<50	<5	<5	110	17	0.07	<5
DEC										
15...	9	<5	230	<50	<5	<5	20	<5	0.15	9
JAN										
12...	<5	<5	2000	<50	<5	<5	39	<5	<0.05	8
FEB										
16...	<5	<5	160	<50	<5	<5	13	11	<0.05	<5
MAR										
27...	<5	<5	1700	<50	<5	<5	43	<5	<0.05	<5
MAY										
03...	<5	<5	1300	<50	<5	<5	43	<5	0.07	<5
30...	<5	<5	1300	<50	<5	<5	44	<5	<0.05	<5
JUL										
20...	<5	<5	2300	<50	<5	<5	130	17	<0.05	<5
AUG										
24...	<5	<5	1400	<50	<5	<5	92	13	<0.05	<5

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV										
03...	<5	<3	<3.0	220	220	5	<5	<50	<50	6.0
DEC										
15...	<5	<3	<3.0	320	--	<5	<5	<50	<50	6.5
JAN										
12...	<5	<3	<3.0	170	--	5	<5	<50	<50	6.1
FEB										
16...	<5	<3	<3.0	280	280	<5	<5	<50	<50	4.3
MAR										
27...	<5	<3	<3.0	230	220	<5	<5	<50	<50	4.3
MAY										
03...	<5	<3	<3.0	220	210	30	25	<50	<50	3.5
30...	<5	<3	<3.0	210	200	<5	<5	<50	<50	4.7
JUL										
20...	<5	<3	<3.0	250	240	<5	<5	<50	<50	6.9
AUG										
24...	<5	<3	<3.0	260	250	<5	<5	<100	<100	6.7

ILLINOIS RIVER BASIN

05554500 VERMILION RIVER AT PONTIAC, IL

LOCATION.--Lat 40°52'40", long 88°38'10", in SW1/4 sec.22, T.28 N., R.5 E., Livingston County, Hydrologic Unit 07130002, near center of span on downstream side of Vermilion Street Bridge in Pontiac, 0.1 mi upstream from Illinois Central Railroad bridge and State Highway 116, 0.8 mi upstream from Turtle Creek, 1.5 mi downstream from Norfolk & Western Railway bridge, and at mile 60.3.

DRAINAGE AREA.--579 mi^2.

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-83-2: 1951, 1957, 1965(M), 1968, 1970, 1980.

GAGE.--Water-stage recorder. Datum of gage is 619.45 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1965, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. An average of 1.4 ft^3/s, diverted 0.5 mi upstream from station for water supply of city of Pontiac, is not included in records. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--47 years, 391 ft^3/s, 9.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft^3/s, Dec. 4, 1982, gage height, 19.16 ft; no flow for many days in 1953, 1983-84, 1986-89.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 2	0845	4,710	10.91	Sept. 10	0145	*5,580	*12.29

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e62	e140	94	41	175	149	236	26	38	2030
2	.00	.00	e62	e130	93	40	163	137	246	24	27	4580
3	.00	.00	e55	e120	69	40	374	135	357	23	16	3330
4	.00	.00	e52	e110	43	78	1460	130	322	23	9.8	2020
5	.00	.00	e50	e100	e35	380	1420	125	259	23	8.0	1350
6	.00	.00	e48	e120	e33	561	833	125	217	21	4.5	1100
7	.00	.00	e46	e150	e30	374	609	117	194	18	2.6	2040
8	.00	.00	e45	232	e27	346	510	106	172	14	.55	2590
9	.00	.00	e42	587	e25	291	487	111	154	10	.00	4680
10	.00	.00	e42	441	e24	252	460	112	143	3.9	.00	5050
11	.00	e10	e44	386	e23	300	393	101	134	.00	.00	3060
12	.00	e27	e47	297	e22	356	353	90	125	.00	.00	1880
13	.00	e60	e50	197	e23	287	320	90	130	1.1	.00	1500
14	.00	e45	e52	172	e25	264	280	92	127	.10	.00	1630
15	.00	e35	e48	148	e30	269	273	90	111	.62	.00	1640
16	.00	e150	e45	130	e32	244	249	86	98	.37	.00	1420
17	.00	e190	e42	122	e35	187	233	79	86	1.5	.00	1100
18	.00	e150	e45	115	e40	180	223	76	79	2.2	.00	851
19	.00	e110	e48	101	e41	187	204	84	73	10	3.6	683
20	.00	e110	e50	94	e44	176	186	210	68	153	221	576
21	.00	e80	e53	81	48	182	177	509	64	470	563	492
22	.00	e100	e55	56	48	173	175	426	59	631	559	437
23	.00	e96	e68	91	45	155	171	332	56	448	532	390
24	.00	e90	e200	93	37	148	158	281	52	258	646	332
25	.00	e85	e190	83	36	147	149	254	47	162	624	292
26	.00	e90	e170	72	36	146	150	261	49	105	353	272
27	.00	e95	e150	92	38	132	151	427	49	72	225	244
28	.00	e84	e100	112	42	139	157	396	41	52	149	218
29	.00	e75	e110	101	---	189	178	325	35	40	110	209
30	.00	e70	e130	95	---	221	171	293	31	35	90	201
31	.00	---	e150	97	---	199	---	264	---	49	87	---
TOTAL	0.00	1752.00	2351	4865	1118	6684	10842	6013	3814	2676.79	4269.05	46197
MEAN	.00	58.4	75.8	157	39.9	216	361	194	127	86.3	138	1540
MAX	.00	190	200	587	94	561	1460	509	357	631	646	5050
MIN	.00	.00	42	56	22	40	149	76	31	.00	.00	201
CFSM	.00	.10	.13	.27	.07	.37	.62	.34	.22	.15	.24	2.66
IN.	.00	.11	.15	.31	.07	.43	.70	.39	.25	.17	.27	2.97

CAL YR 1988 TOTAL 55128.63 MEAN 151 MAX 2690 MIN .00 CFSM .26 IN. 3.54
WTR YR 1989 TOTAL 90581.84 MEAN 248 MAX 5050 MIN .00 CFSM .43 IN. 5.82

e Estimated

ILLINOIS RIVER BASIN

05555300 VERMILION RIVER NEAR LEONORE, IL

LOCATION.--Lat 41°12'30", long 88°55'51", in SW1/4SW1/4 sec.30, T.32 N., R.3 E., La Salle County, Hydrologic Unit 07130002, on left downstream side of county highway bridge, 3 mi northeast of Leonore, 6.2 mi downstream from Otter Creek, 8 mi northwest of Streator, and at mile 17.2.

DRAINAGE AREA.--1,251 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1931 to current year. Prior to October 1971, published as "at Lowell."

REVISED RECORDS.--WSP 745: 1931-32. WSP 1308: 1932(M), 1935-38(M), 1940(M), 1942(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 520.58 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 20, 1952, nonrecording gage at site 6.8 mi downstream at datum 19.97 ft lower. Aug. 20, 1952, to Sept. 30, 1971, nonrecording gage at site 6.7 mi downstream at datum 19.97 ft lower.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--58 years, 820 ft^3/s, 8.90 in/yr; discharge for site at Lowell adjusted for difference in drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,500 ft^3/s, July 15, 1958, gage height, 15.30 ft, from graph based on gage readings, site and datum then in use; maximum gage height, 27.13 ft, Dec. 4, 1982, present site; minimum discharge, 2.6 ft^3/s, Aug. 3, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept.3	Unknown	10,000	Unknown	Sept. 8	0915	*11,600	*16.42

Minimum daily discharge, 13 ft^3/s, Aug. 13, 14, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	43	115	267	e250	133	265	235	846	66	55	3540
2	60	43	111	225	e240	141	259	211	839	53	64	e5000
3	60	42	107	195	e220	144	308	197	582	42	53	e9000
4	47	54	96	171	e180	296	1050	194	589	40	50	e5400
5	43	73	96	150	e160	1250	1980	199	490	35	38	e2800
6	40	41	95	180	e110	1160	1520	188	387	33	30	e3200
7	39	36	91	219	e90	1400	1100	184	320	31	24	5180
8	39	40	82	e420	e72	1030	896	181	279	36	21	9980
9	38	44	77	e460	e68	791	798	191	240	59	18	10600
10	38	68	76	e700	e67	754	743	190	213	21	15	10000
11	35	20	71	e620	e65	709	668	191	198	18	15	7020
12	33	23	72	e500	e62	708	569	184	208	24	e14	4020
13	33	25	76	e400	e67	692	510	174	202	18	13	2990
14	34	17	79	e310	e72	606	456	165	194	15	13	3220
15	38	21	74	e270	e80	573	401	163	187	15	21	3030
16	39	150	68	e250	e85	513	384	162	172	15	21	2460
17	45	168	70	e230	e86	483	345	156	153	14	15	2020
18	63	124	70	e220	e90	422	325	157	139	25	13	1680
19	52	128	70	e220	e92	388	303	167	123	75	14	1350
20	43	126	73	e210	e96	384	276	186	111	26	15	1170
21	46	147	68	e190	e100	363	255	318	99	137	16	1000
22	49	183	70	e160	e100	345	236	e490	94	841	23	893
23	59	170	121	e210	e96	338	234	e620	86	936	33	726
24	66	174	89	e190	e100	322	223	e480	81	574	25	653
25	46	178	162	e170	e105	308	211	e500	87	342	129	592
26	e38	179	417	e160	e110	300	203	e520	95	232	206	549
27	e35	178	318	e230	e115	300	245	e600	104	226	168	476
28	e34	154	215	e300	e120	271	237	e540	90	138	120	454
29	e32	145	253	e290	---	210	250	e480	78	99	84	407
30	e34	132	249	e270	---	208	251	e430	68	83	64	371
31	e38	---	304	e260	---	252	---	381	---	61	71	---
TOTAL	1347	2926	3935	8647	3098	15794	15501	9034	7354	4330	1461	99781
MEAN	43.5	97.5	127	279	111	509	517	291	245	140	47.1	3326
MAX	66	183	417	700	250	1400	1980	620	846	936	206	10600
MIN	32	17	68	150	62	133	203	156	68	14	13	371
CFSM	.03	.08	.10	.22	.09	.41	.41	.23	.20	.11	.04	2.66
IN.	.04	.09	.12	.26	.09	.47	.46	.27	.22	.13	.04	2.97

CAL YR 1988 TOTAL 149434.4 MEAN 408 MAX 7200 MIN 2.6 CFSM .33 IN. 4.44
WTR YR 1989 TOTAL 173208 MEAN 475 MAX 10600 MIN 13 CFSM .38 IN. 5.15

e Estimated

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
27...	0800	17002	17002	35	1020	8.30	6.0	4.4	10.8	19	K20
DEC											
13...	1330	17002	17002	80	1090	8.20	1.0	2.2	12.0	26	110
JAN											
25...	1530	17002	17002	170	819	8.30	3.0	3.2	11.9	10	K120
FEB											
22...	1345	17002	17002	100	945	8.80	0.0	5.3	14.0	14	580
APR											
12...	1530	17002	17002	531	714	8.00	9.5	11	11.8	8	K42
MAY											
30...	1500	17002	17002	430	809	8.60	23.0	2.6	8.1	12	560
JUN											
27...	1645	17002	17002	105	723	7.90	28.0	5.4	8.8	16	200

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT											
27...	470	180	100	100	53	53	70	70	8.7	8.7	292
DEC											
13...	430	170	92	93	46	47	68	69	7.8	7.7	260
JAN											
25...	350	170	81	80	37	37	24	24	2.5	2.4	180
FEB											
22...	490	270	110	110	55	54	52	50	4.0	3.8	220
APR											
12...	360	200	84	81	40	39	14	14	0.9	0.49	168
MAY											
30...	400	200	90	88	44	43	14	13	1.2	0.80	196
JUN											
27...	350	160	69	69	45	44	22	22	2.5	1.6	192

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
OCT 27...	160	5	2	1.00	0.240	0.007	0.290	0.200	290	180	30
DEC 13...	170	<1	<1	3.40	0.180	0.003	1.17	1.09	80	<50	10
JAN 25...	130	6	6	15.0	0.340	0.007	0.490	0.440	200	60	40
FEB 22...	160	4	2	11.0	0.380	0.020	0.660	0.530	330	190	6
APR 12...	90	23	3	22.0	0.060	0.001	0.160	0.120	980	620	50
MAY 30...	88	26	8	18.0	0.120	0.021	0.270	0.240	1100	360	60
JUN 27...	100	31	8	7.90	0.040	0.002	0.430	0.330	530	50	50

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT 27...	30	<0.5	<0.5	550	540	<3	<3	<5	<5	<5	<5
DEC 13...	8	<0.5	<0.5	380	380	<3	<3	7	<5	<5	<5
JAN 25...	36	<0.5	<0.5	110	110	<3	<3	<5	<5	<5	<5
FEB 22...	<5	<0.5	<0.5	160	160	<3	<3	<5	<5	<5	<5
APR 12...	42	<0.5	<0.5	70	70	<3	<3	<5	<5	<5	<5
MAY 30...	51	<0.5	<0.5	100	90	<3	<3	<5	<5	<5	<5
JUN 27...	49	<0.5	<0.5	150	140	<3	<3	<5	<5	<5	<5

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT										
27...	<5	<5	460	97	<5	<5	31	15	<0.05	<5
DEC										
13...	<5	<5	410	72	<5	<5	20	15	<0.05	5
JAN										
25...	<5	<5	400	<50	<5	<5	32	21	<0.05	<5
FEB										
22...	<5	<5	350	<50	<5	<5	31	25	<0.05	<5
APR										
12...	<5	<5	580	<50	<5	<5	23	7	<0.05	<5
MAY										
30...	<5	<5	1100	<50	<5	<5	32	<5	<0.05	<5
JUN										
27...	<5	<5	700	<50	<5	<5	49	8	<0.05	10

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
27...	6	<3	<3.0	400	400	<5	<5	<50	--	--
DEC										
13...	<5	<3	<3.0	320	--	<5	<5	<50	<50	11
JAN										
25...	<5	<3	<3.0	210	210	<5	<5	<50	<50	12
FEB										
22...	<5	<3	<3.0	260	250	<5	<5	<50	<50	--
APR										
12...	<5	<3	<3.0	190	190	<5	<5	<50	<50	3.8
MAY										
30...	<5	<3	<3.0	220	210	<5	<5	<50	<50	--
JUN										
27...	7	<3	<3.0	230	220	<5	<5	<50	<50	6.1

05556500 BIG BUREAU CREEK AT PRINCETON, IL

LOCATION.--Lat 41°21'55", long 89°29'55", in SW1/4SE1/4 sec.18, T.16 N., R.9 E., Bureau County, Hydrologic Unit 07130001, on right bank 500 ft downstream from bridge on U.S. Highways 6 and 34, 0.6 mi downstream from Epperson Run, 1.5 mi west of Princeton, and at mile 20.5.

DRAINAGE AREA.--196 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1936 to current year. Prior to October 1974, published as Bureau Creek at Princeton.

REVISED RECORDS.--WSP 1175: 1940-41, 1948. WSP 1308: 1942(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 555.39 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at bridge 400 ft upstream at datum 30.00 ft lower. July 18, 1940, to Sept. 30, 1944, water-stage recorder at site 500 ft upstream at present datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 134 ft^3/s, 9.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s, May 17, 1974, gage height, 16.01 ft, from rating curve extended above 11,800 ft^3/s; no flow during January 1940 and for several days in October and November 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 11	0145	*1,870	*6.31	No other peak greater than base discharge.			

Minimum discharge, 0.50 ft^3/s, Aug. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.3	9.5	e7.0	22	e11	45	14	17	6.0	1.6	119
2	1.9	4.4	8.5	e6.0	e11	e11	41	15	360	5.6	1.5	293
3	1.9	4.6	8.0	e5.5	e12	e14	40	13	154	5.2	1.6	118
4	2.1	10	7.1	e5.0	e12	e25	38	14	172	4.2	2.1	65
5	2.0	4.3	7.2	e6.6	e12	e300	33	13	94	3.7	2.0	39
6	2.1	4.0	7.1	e8.0	e11	e270	31	13	62	3.5	1.0	349
7	2.1	4.6	6.9	e13	e10	e200	29	13	47	3.1	1.2	189
8	2.1	4.2	6.4	e11	e10	e160	31	12	37	2.5	1.3	170
9	2.0	6.2	6.3	e8.0	e10	147	27	17	30	2.1	1.3	145
10	2.1	8.9	6.1	e6.8	e9.6	419	26	13	26	1.9	1.4	105
11	2.5	5.3	6.0	e7.6	e10	1020	23	12	23	2.2	1.3	98
12	2.8	9.5	6.7	e9.0	e12	322	21	11	29	3.4	1.2	73
13	3.2	7.4	6.4	e9.4	e13	152	20	8.3	66	3.1	1.0	61
14	2.8	5.8	5.6	e9.4	e13	111	19	6.7	39	2.0	1.8	47
15	2.9	14	5.2	e9.0	e12	101	18	6.7	28	1.8	2.1	39
16	3.1	16	6.1	e8.6	e11	84	17	6.7	21	1.8	1.4	35
17	5.0	6.8	6.5	e8.2	e11	72	17	6.8	18	1.8	1.5	29
18	3.1	8.2	6.6	e8.0	e10	62	20	7.3	15	2.0	1.6	24
19	2.7	18	6.0	e8.0	e11	51	19	8.4	14	3.6	1.9	19
20	3.1	12	5.7	e8.0	e12	49	18	7.0	12	3.1	5.8	16
21	5.2	9.4	5.1	e10	e12	44	16	6.0	10	7.8	1.3	13
22	3.0	7.1	6.6	e11	e11	37	15	7.2	9.7	3.0	8.5	12
23	14	6.8	6.3	e9.5	e10	36	14	6.5	8.3	2.2	3.2	9.8
24	5.1	6.0	5.7	e8.8	e11	32	13	6.5	8.6	2.3	2.7	8.6
25	4.6	5.8	6.3	e8.6	e12	31	12	7.3	7.7	2.1	2.2	8.6
26	4.4	12	6.6	e8.8	e12	31	15	7.4	7.1	2.1	10	8.4
27	4.4	8.9	14	e9.0	e12	32	18	6.7	9.1	2.0	3.9	7.7
28	4.0	7.1	11	e10	e11	35	17	15	8.8	1.6	41	7.3
29	4.2	7.4	e10	e13	---	44	15	11	9.0	1.4	6.4	6.9
30	3.9	8.5	e9.0	17	---	52	14	9.3	7.0	1.3	3.6	6.6
31	4.4	---	e8.0	21	---	49	---	7.4	---	1.7	9.9	---
TOTAL	111.1	237.5	222.5	288.8	325.6	4004	682	308.2	1349.3	90.1	127.3	2121.9
MEAN	3.58	7.92	7.18	9.32	11.6	129	22.7	9.94	45.0	2.91	4.11	70.7
MAX	14	18	14	21	22	1020	45	17	360	7.8	41	349
MIN	1.9	4.0	5.1	5.0	9.6	11	12	6.0	7.0	1.3	1.0	6.6
CFSM	.02	.04	.04	.05	.06	.66	.12	.05	.23	.01	.02	.36
IN.	.02	.05	.04	.05	.06	.76	.13	.06	.26	.02	.02	.40

CAL YR 1988 TOTAL 38218.8 MEAN 104 MAX 2500 MIN 1.0 CFSM .53 IN. 7.25
WTR YR 1989 TOTAL 9868.3 MEAN 27.0 MAX 1020 MIN 1.0 CFSM .14 IN. 1.87

e Estimated

05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
18...	1515	17002	17002	3.2	646	8.40	17.0	7.3	13.9	44	1200
NOV											
21...	1200	17002	17002	9.0	648	7.70	5.5	12	12.6	14	290
JAN											
10...	1530	17002	17002	E6.8	441	7.80	-0.5	66	12.1	60	K190
FEB											
21...	1330	17002	17002	E12	748	8.20	2.0	2.9	13.2	16	K33
MAR											
20...	1600	17002	17002	53	646	8.00	3.5	4.5	12.7	9	K13
MAY											
08...	1210	17002	17002	12	614	8.30	15.0	--	14.9	18	K60
24...	0800	17002	17002	6.0	--	--	--	2.8	--	--	--
31...	0930	17002	17002	6.5	634	7.90	24.0	4.9	7.7	18	330
JUN											
26...	1220	17002	17002	7.7	609	8.10	29.5	12	9.3	23	580

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
18...	250	32	58	53	30	28	57	56	7.7	7.2	216
NOV											
21...	260	45	58	55	31	30	28	27	3.0	2.8	216
JAN											
10...	180	52	45	39	22	20	16	15	5.8	5.1	128
FEB											
21...	340	110	75	76	36	36	37	--	4.4	4.5	228
MAR											
20...	310	--	74	--	31	32	13	14	2.1	2.2	204
MAY											
08...	270	270	56	52	37	35	23	22	1.8	2.1	--
24...	--	--	--	--	--	--	--	--	--	--	208
31...	280	78	56	55	35	35	23	23	3.8	3.7	204
JUN											
26...	260	75	50	49	35	34	31	31	3.7	3.7	188

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
OCT											
18...	44	50	17	1.90	0.050	0.004	1.89	1.67	1400	110	50
NOV											
21...	58	10	6	1.60	0.050	<0.001	0.790	0.760	230	<50	50
JAN											
10...	40	61	16	3.60	0.610	0.003	0.500	0.300	1200	60	60
FEB											
21...	69	3	1	3.40	0.070	0.001	0.690	0.690	120	70	60
MAR											
20...	60	9	7	8.60	0.110	0.001	0.230	0.220	160	<50	30
MAY											
08...	--	--	--	1.40	0.080	0.004	0.580	0.510	820	700	60
24...	61	15	3	--	--	--	--	--	--	--	--
31...	54	14	7	0.600	0.380	0.016	0.630	0.540	620	380	60
JUN											
26...	53	30	8	2.60	0.230	0.021	1.13	0.970	660	--	80

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT											
18...	23	<0.5	<0.5	400	390	<3	<3	<5	<5	<5	<5
NOV											
21...	43	<0.5	<0.5	120	110	<3	<3	<5	<5	6	7
JAN											
10...	45	<0.5	<0.5	<50	<50	<3	<3	<5	6	<5	<5
FEB											
21...	55	<0.5	<0.5	100	100	<3	<3	<5	<5	6	<5
MAR											
20...	30	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5	<5
MAY											
08...	52	<0.5	<0.5	90	80	<3	<3	6	<5	<5	<5
24...	--	--	--	--	--	--	--	--	--	--	--
31...	60	<0.5	<0.5	110	110	<3	<3	<5	5	<5	<5
JUN											
26...	70	<0.5	<0.5	150	150	<3	<3	<5	--	<5	<5

05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
OCT 18...	7	<5	1500	<50	<5	<5	150	36	<0.05	12
NOV 21...	6	6	300	<50	<5	<5	34	16	0.07	23
JAN 10...	<5	--	1700	100	<5	<5	81	13	<0.05	<5
FEB 21...	9	9	120	<50	<5	<5	29	26	<0.05	7
MAR 20...	<5	--	160	<50	<5	<5	44	36	<0.05	<5
MAY 08...	<5	<5	230	<50	<5	<5	59	20	<0.05	<5
24...	--	--	--	--	--	--	--	--	--	--
31...	<5	<5	440	60	<5	<5	75	32	<0.05	7
JUN 26...	<5	--	780	83	<5	10	83	35	<0.05	<5

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT 18...	12	<3	<3.0	130	120	<5	<5	<50	<50	<1
NOV 21...	18	<5	<5.0	130	120	<5	<5	<50	<50	--
JAN 10...	--	<3	<3.0	80	70	<5	<5	<50	<50	--
FEB 21...	<5	6	<3.0	140	--	6	<5	<50	<50	--
MAR 20...	<5	<3	<3.0	120	--	<5	<5	<50	<50	--
MAY 08...	<5	<3	<3.0	130	120	<5	<5	<50	<50	--
24...	--	--	--	--	--	--	--	--	--	--
31...	<5	<3	<3.0	130	130	<5	<5	<50	<50	<1
JUN 26...	<5	<3	<3.0	130	130	<5	<5	<50	<50	--

05557000 WEST BUREAU CREEK AT WYANET, IL

LOCATION.--Lat 41°21'54", long 89°34'08", in NE1/4NE1/4 sec.21, T.16 N., R.8 E., Bureau County, Hydrologic Unit 07130001, at bridge on U.S. Highways 6 and 34, 0.5 mi east of Wyanet, 8.7 mi downstream from Lime Creek, and at mile 6.0.

DRAINAGE AREA.--86.7 mi^2

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1972, 1974-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DQD 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV											
21...	1400	17002	17002	2.0	671	7.60	4.0	2.9	10.8	13	K150
JAN											
10...	1430	17002	17002	1.1	524	7.80	0.0	15	14.1	39	330
FEB											
21...	1500	17002	17002	1.5	843	8.00	0.5	1.2	11.6	5	K80
MAR											
20...	1500	17002	17002	4.5	737	8.10	3.5	2.7	12.8	10	K25
MAY											
08...	1130	17002	17002	1.4	677	8.10	13.5	1.9	13.9	13	K150
31...	0800	17002	17002	0.88	702	7.60	22.5	2.0	5.0	12	190
JUN											
26...	1300	17002	17002	0.60	636	8.00	29.0	7.4	9.7	21	240

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
NOV											
21...	340	110	74	73	38	38	16	15	2.3	2.3	228
JAN											
10...	290	110	69	67	31	30	17	17	6.0	5.7	184
FEB											
21...	450	--	100	--	47	--	15	--	2.7	3.0	256
MAR											
20...	350	130	93	84	38	34	14	13	2.5	2.3	220
MAY											
08...	330	130	69	67	41	40	15	15	1.4	1.8	204
31...	340	130	71	71	40	40	16	16	2.6	2.4	216
JUN											
26...	300	110	63	61	37	37	15	15	3.2	3.4	200

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05557000 WEST BUREAU CREEK AT WYANET, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)
NOV											
21...	93	1	1	0.100	0.030	<0.001	0.040	0.040	<50	<50	70
JAN											
10...	84	9	5	3.20	0.520	0.003	0.180	0.120	310	<50	70
FEB											
21...	130	1	1	2.10	0.030	<0.001	0.010	0.010	90	90	70
MAR											
20...	100	6	6	7.60	0.140	0.002	0.100	0.090	170	50	40
MAY											
08...	98	8	2	0.500	0.020	<0.001	0.040	0.010	940	820	70
31...	86	4	4	<0.100	0.060	0.001	0.080	0.060	450	390	70
JUN											
26...	75	32	10	<0.100	0.040	0.003	0.130	0.030	550	60	100

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
NOV										
21...	65	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JAN										
10...	63	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
FEB										
21...	--	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAR										
20...	35	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAY										
08...	61	<1.0	<1	<50	<50	<3	<3	5	<5	<5
31...	69	<0.5	<0.5	<50	<50	<3	<3	<5	5	<5
JUN										
26...	88	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5

05557000 WEST BUREAU CREEK AT WYANET, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
NOV										
21...	<5	<5	<5	60	<50	<5	<5	42	38	0.48
JAN										
10...	<5	<5	<5	390	59	<5	<5	30	21	<0.05
FEB										
21...	<5	<5	<5	<50	<50	<5	<5	22	23	<0.05
MAR										
20...	<5	<5	<5	70	<50	<5	<5	46	38	<0.05
MAY										
08...	<5	<5	<5	240	<50	<5	<5	39	15	<0.05
31...	<5	<5	<5	210	79	<5	<5	270	250	<0.05
JUN										
26...	<5	<5	<5	650	<50	<5	<5	220	100	<0.05

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV										
21...	9	8	<3	<3.0	150	150	<5	<5	<50	<50
JAN										
10...	6	6	<3	<3.0	130	120	<5	<5	<50	--
FEB										
21...	5	<5	<5	<3.0	180	--	<5	<5	<50	<50
MAR										
20...	<5	<5	<3	<3.0	160	150	<5	<5	<50	<50
MAY										
08...	<5	<5	<3	<3.0	150	150	<5	<5	<50	<50
31...	7	<5	<3	<3.0	160	160	<5	<5	<50	<50
JUN										
26...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50

05558300 ILLINOIS RIVER AT HENRY, IL

LOCATION.--Lat 41°06'36", long 89°21'00", in SW1/4 sec.15, T.13 N., R.10 E., Marshall County, Hydrologic Unit 07130001, on right bank about 600 ft upstream from bridge on State Highway 18, 4.4 mi upstream from Crow Creek, 38.2 mi upstream from Peoria Lock and Dam, and at mile 196.0.

DRAINAGE AREA.--13,543 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and point-velocity meter. Datum of gage is 425.83 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Some regulation by locks and dams upstream from station at Starved Rock and downstream at Peoria. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--8 years, 15,350 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft^3/s, Dec. 7, 1982, based on area-velocity curve; maximum gage height, 32.02 ft, Mar. 7, 1985; minimum daily discharge, 3,710 ft^3/s, Aug. 31, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 22, 1979, reached a stage of 32.67 ft, from information by the U.S. Army Corps of Engineers, discharge, about 140,000 ft^3/s, based on rating curve extended above 32.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 45,000 ft^3/s, Sept. 11, based on area-velocity curve; maximum gage height, 26.02 ft, Sept. 11; minimum daily discharge, 3,800 ft^3/s, Oct. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4700	6470	e8500	10600	11100	e7000	e12300	8190	18000	e8200	e12000	14500
2	e6000	6300	e8500	10900	10000	e7000	e13000	e8300	33400	e7800	e11000	33500
3	e5000	5340	8610	9690	10800	e7100	e14000	e8200	40100	e7400	e11000	43600
4	e4700	6890	7270	7890	10300	9380	15900	e7800	e43000	e7200	15800	34380
5	e4000	7400	7830	9380	7840	13800	17400	e7500	e40000	e7000	17600	26800
6	e3800	8020	7290	10300	7340	14500	18300	e7200	e33000	e6900	18800	33200
7	e4300	9340	7130	10400	7410	13800	21700	e7500	e30000	e6700	13000	e25000
8	e4900	9150	5840	11800	7760	13800	22000	6450	e26000	e6700	11300	e32000
9	e5100	9000	6320	e9480	e7300	13600	16300	e6300	e22000	e6500	10800	e38000
10	e4900	12400	6290	15600	e7000	e12000	15900	e6400	e18000	e6600	10600	e42000
11	e4500	e12000	5260	16300	e6900	e11000	16000	6020	e16000	e7300	10500	e45000
12	e4700	e11000	4390	14300	e7000	e11600	14400	5870	e14000	e7800	e10000	e43000
13	e4000	12400	6420	14600	7710	e11000	e12200	5600	e15000	e7500	e9700	e43000
14	e5200	10800	6190	e13800	7200	e11400	e11500	e5900	e16000	e6900	e9500	e40000
15	e4000	11600	5710	13200	7680	e12000	e11000	e5800	e15000	e6800	e8700	e32000
16	e5000	23700	4480	11200	7350	e11900	e10500	e5700	e13000	e6690	e8200	e28000
17	e5600	17000	4540	11200	8020	e12300	e10000	e5600	e12000	e6420	e7600	e26000
18	e7000	15900	4890	10400	7740	e12500	e9400	e6000	e11000	e7990	e7000	e24000
19	e8300	16400	4460	9170	e7400	e12600	e8800	e7000	e10000	e14900	e6600	e22000
20	e7500	14400	5590	9100	e7500	e13000	e8500	e7500	e9600	e21600	e6800	e19000
21	e6800	15600	6090	7160	e7600	e13800	e7900	8340	e9200	e19900	e7000	e18000
22	e6300	13500	5840	8370	e7800	e14000	e7500	e9800	e9000	e21000	e7100	e16000
23	e6800	14600	8130	8760	e7200	e13000	6900	e10000	e8800	e17800	e7200	e15000
24	e6900	13800	8190	9150	e7100	e12000	e7200	e9000	e8400	e20000	e7100	e14000
25	6450	14300	8960	9130	e6900	e11400	e7100	e10000	e8200	e12000	e7200	e13500
26	6250	12900	e9500	9550	e7000	e11000	e7000	e11000	e8000	e10200	e6800	e13000
27	5430	12200	e10500	9580	e7200	e10400	e7400	e10000	e7900	e12700	e7200	e12000
28	6230	14800	11500	9600	e7100	e11400	e8100	e11000	e8000	e11800	e7600	e12000
29	6620	e11000	e12000	9820	---	e12000	e8500	e13000	e9000	e11300	e8000	e11500
30	6600	e9500	e12000	10500	---	e12800	e8400	e17000	e8700	e11100	e8000	e11000
31	6910	---	12300	10000	---	e13100	---	21100	---	e11900	10400	---
TOTAL	174590	357710	230520	330930	219250	366180	355100	264870	520300	323900	300100	780980
MEAN	5632	11920	7436	10680	7830	11810	11840	8544	17340	10450	9681	26030
MAX	8300	23700	12300	16300	11100	14500	22000	21100	43000	21600	18800	45000
MIN	3800	5340	4390	7160	6900	7000	6900	5600	7900	6420	6600	11000

CAL YR 1988 TOTAL 4026860 MEAN 11000 MAX 40100 MIN 3710
WTR YR 1989 TOTAL 4224430 MEAN 11570 MAX 45000 MIN 3800

e Estimated

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL

LOCATION.--Lat 40°43'30", long 89°32'58", in SE1/4 sec 26, T.9 N., R.8 E., Peoria County, Hydrologic Unit 07130001, at the city of Peoria water intake, 3.0 mi upstream from Farm Creek and at mile 166.1.

DRAINAGE AREA.--13,900 mi^2, approximately.

PERIOD OF RECORD.--Water years 1970-72, 1978 to current year.

REMARKS.--Water-discharge records from Mackinaw River near Congerville (station 05567500) and Illinois River at Kingston Mines (station 05568500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
DEC											
05...	1000	17002	17002	5640	772	7.40	3.0	15	13.9	26	K20
JAN											
23...	1000	17002	17002	6970	808	8.00	2.0	25	13.9	19	K30
FEB											
23...	1100	17002	17002	6350	1030	7.90	0.0	6.7	14.6	16	<5
APR											
11...	1200	17002	17002	16500	787	7.80	8.0	17	12.1	20	K10
12...	1510	17002	17002	14800	760	8.00	11.0	35	11.0	28	--
MAY											
09...	1500	17002	17002	7340	845	8.40	15.0	29	10.0	37	--
11...	1100	17002	17002	7070	834	8.50	14.5	25	10.1	29	K20
JUN											
06...	1330	17002	17002	24600	569	7.20	23.0	31	5.9	25	--
14...	1100	17002	17002	17200	681	8.00	23.0	14	8.4	32	K30
JUL											
11...	1215	17002	17002	5800	792	8.20	30.0	4.5	8.0	27	--
AUG											
15...	1300	17002	17002	7380	635	7.90	26.0	22	8.1	28	--
SEP											
11...	1250	17002	17002	24600	490	7.50	22.5	12	5.4	18	--

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)
DEC											
05...	310	130	83	78	31	29	41	39	4.5	3.9	185
JAN											
23...	300	130	77	75	29	28	46	46	2.8	2.6	176
FEB											
23...	350	180	87	86	33	33	85	85	4.9	4.8	170
APR											
11...	320	140	78	77	31	30	39	39	3.7	2.9	173
12...	300	130	80	72	31	29	38	36	3.7	3.3	173
MAY											
09...	310	130	78	74	33	31	57	57	4.3	3.3	181
11...	300	120	79	70	33	30	53	48	4.3	3.5	176
JUN											
06...	210	100	55	53	21	20	30	29	3.6	3.2	114
14...	290	290	74	72	28	27	30	30	4.1	2.8	--
JUL											
11...	270	93	71	66	28	26	55	51	3.9	4.3	179
AUG											
15...	220	73	55	52	23	22	45	43	7.1	6.9	148
SEP											
11...	200	72	49	47	20	19	19	19	4.9	3.9	124

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
DEC											
05...	120	--	0.3	--	65	8	5.40	0.190	<0.001	1.3	1.5
JAN											
23...	110	80	0.3	448	56	5	7.00	0.300	0.003	1.3	1.6
FEB											
23...	130	120	0.5	553	71	6	5.90	0.660	0.004	1.5	2.2
APR											
11...	100	66	0.3	420	75	9	9.70	0.480	0.005	0.82	1.3
12...	100	63	0.3	410	140	--	9.80	0.390	0.008	1.1	1.5
MAY											
09...	110	84	0.5	473	156	--	3.80	<0.100	<0.007	--	0.70
11...	120	80	0.4	454	75	13	4.30	0.190	0.015	1.0	1.2
JUN											
06...	65	46	0.3	286	78	--	6.90	0.220	0.002	0.79	1.0
14...	84	49	0.3	266	76	12	5.90	0.100	0.005	1.4	1.5
JUL											
11...	110	75	0.5	443	59	--	2.20	0.140	0.017	1.9	2.0
AUG											
15...	75	66	0.4	354	59	--	1.60	0.170	0.008	1.3	1.5
SEP											
11...	46	31	0.2	241	51	--	4.00	<0.100	<0.002	--	0.90

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)
DEC											
05...	6.9	0.290	0.180	1700	<50	2	50	36	<0.5	<0.5	120
JAN											
23...	8.6	0.270	0.150	1200	<50	2	60	43	<0.5	<0.5	100
FEB											
23...	8.1	0.351	0.270	540	70	2	50	42	<0.5	<0.5	170
APR											
11...	11	0.283	0.130	1500	130	2	50	41	<0.5	<0.5	110
12...	11	0.381	0.140	2500	330	2	60	42	<1.0	<0.5	110
MAY											
09...	4.5	0.500	0.170	2800	100	3	60	39	<0.5	<0.5	160
11...	5.5	0.330	0.180	1500	140	2	50	37	<0.5	<0.5	150
JUN											
06...	7.9	0.260	0.110	3100	880	2	60	44	<0.5	<0.5	100
14...	7.4	0.250	0.090	2900	880	3	70	54	<0.5	<0.5	110
JUL											
11...	4.2	0.300	0.250	1400	320	3	60	54	<0.5	<0.5	140
AUG											
15...	3.1	0.160	0.100	1000	<50	3	50	40	<0.5	<0.5	110
SEP											
11...	4.9	0.300	0.190	1700	<50	2	60	41	<0.5	<0.5	100

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
DEC										
05...	120	<3	<3	8	<5	<5	<5	<5	<5	2400
JAN										
23...	100	<3	<3	<5	<5	<5	<5	<5	<5	2000
FEB										
23...	170	<3	<3	7	5	<5	<5	<5	<5	820
APR										
11...	110	<3	<3	6	<5	<5	<5	<5	<5	2000
12...	100	<3	<3	9	<5	<5	<5	9	<5	3500
MAY										
09...	160	<3	<3	10	<5	<5	<5	13	6	3900
11...	130	<3	<3	8	<5	<5	<5	6	<5	2000
JUN										
06...	90	<3	<3	6	<5	<5	<5	18	10	2900
14...	100	<3	<3	8	<5	<5	<5	8	<5	3100
JUL										
11...	120	<3	<3	6	<5	<5	<5	13	12	1800
AUG										
15...	110	<3	<3	<5	<5	<5	<5	12	<5	1600
SEP										
11...	100	<3	<3	6	<5	<5	<5	18	13	2300

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (0[illegible]55)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
DEC										
05...	<50	8	<5	67	<5	0.05	16	15	<3	<3.0
JAN										
23...	<50	<5	<5	61	8	<0.05	9	<5	<3	<3.0
FEB										
23...	<50	<5	<5	73	52	<0.05	14	13	<3	<3.0
APR										
11...	<50	5	<5	74	9	0.07	<5	<5	<3	<3.0
12...	84	8	<5	120	8	<0.05	9	<5	<3	<3.0
MAY										
09...	<50	11	<5	160	<5	0.06	14	11	<3	<3.0
11...	<50	5	<5	110	<5	<0.05	8	<5	<3	<3.0
JUN										
06...	<50	6	<5	72	<5	<0.05	5	<5	<3	<3.0
14...	<50	7	<5	130	9	<0.05	10	7	<3	<3.0
JUL										
11...	600	6	6	120	100	<0.05	13	<5	<3	<3.0
AUG										
15...	<50	7	<5	120	<5	<0.05	8	<5	<3	<3.0
SEP										
11...	<50	<5	<5	61	<5	<0.05	12	<5	<3	<3.0

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV GRAVIMETRIC (MG/L) (00556)
DEC										
05...	300	290	<5	<5	<100	<100	8.9	<0.005	<5	2
JAN										
23...	270	260	<5	<5	<100	<100	6.9	<0.005	5	1
FEB										
23...	330	330	<5	<5	<50	<50	7.1	<0.005	<5	2
APR										
11...	260	260	<5	<5	<50	<50	9.0	<0.005	<5	1
12...	260	240	6	<5	<100	<100	--	<0.005	<5	--
MAY										
09...	280	270	<5	<5	<100	<100	--	<0.005	<5	--
11...	290	260	5	<5	<50	<50	8.9	<0.005	<5	2
JUN										
06...	170	160	7	<5	<50	<50	--	0.005	<5	--
14...	210	210	7	<5	<50	<50	9.0	0.005	40	<1
JUL										
11...	260	240	<5	<5	<50	<50	--	0.005	<5	--
AUG										
15...	280	260	<5	<5	<50	<50	--	<0.005	<5	--
SEP										
11...	170	170	7	<5	<100	<100	--	<0.005	<5	--

05563800 ILLINOIS RIVER AT PEKIN, IL

LOCATION.--Lat 40°34'23", long 89°39'17", in SW1/4 sec 24, T 7 N., R 7 E., Tazewell County, Hydrologic Unit 07130003, at State Highway 9 bridge at Pekin, 5.1 mi upstream from Mackinaw River and at mile 152.9.

DRAINAGE AREA.--14,585 mi^2

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1960-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 05.

REMARKS.--Water-discharge records from Illinois River at Kingston Mines (station 05568500) and Mackinaw River near Congerville (station 05567500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
27...	1100	17002	17002	6300	737	7.80	10.0	4.1	10.7	26	2200
NOV											
02...	1100	17002	17002	5760	681	7.90	7.0	17	11.5	23	K5
28...	1100	17002	17002	8400	740	7.70	7.0	12	11.2	13	K250
JAN											
11...	1200	17002	17002	11700	[illegible]	[illegible]	1.0	[illegible]	14.3	19	K20
FEB											
16...	1000	17002	17002	7230	902	7.80	1.0	21	15.2	22	K30
MAR											
14...	1100	17002	17002	13900	[illegible]	7.80	7.0	5.5	13.7	22	150
APR											
12...	1645	17002	17002	15500	785	7.80	9.0	33	10.9	26	--
MAY											
09...	1020	17002	17002	7700	879	8.40	14.5	13	10.1	27	--
09...	1100	17002	17002	7700	878	8.20	14.0	8.8	10.1	20	K160
JUN											
06...	1015	17002	17002	25900	592	7.20	22.5	27	4.8	26	--
13...	1100	17002	17002	18900	675	[illegible]	24.0	22	7.4	34	1300
JUL											
11...	1010	17002	17002	6090	806	8.10	30.5	4.1	5.5	28	--
AUG											
15...	1040	17002	17002	7750	660	7.80	26.0	20	6.9	27	--
SEP											
11...	1030	17002	17002	25800	481	7.60	22.5	23	5.7	21	--

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT											
27...	230	72	58	54	24	22	62	60	5.6	5.1	154
NOV											
02...	230	74	55	55	24	23	55	56	4.8	4.5	159
28...	410	160	97	93	45	43	35	34	4.3	3.7	247
JAN											
11...	320	140	82	80	30	29	74	73	3.6	3.4	183
FEB											
16...	360	160	91	88	34	33	57	58	4.6	4.2	201
MAR											
14...	300	140	75	75	28	28	87	87	4.6	4.5	168
APR											
12...	290	120	80	71	31	28	41	38	3.7	2.8	176
MAY											
09...	320	140	76	76	32	32	62	62	5.0	4.4	181
09...	300	120	75	72	32	30	61	60	5.0	4.6	184
JUN											
06...	210	97	56	53	22	20	31	31	3.2	2.8	118
13...	250	250	73	62	28	23	31	28	4.1	3.2	--
JUL											
11...	290	110	70	68	29	28	58	58	5.3	5.3	179
AUG											
15...	220	74	54	53	22	22	46	46	4.0	3.0	150
SEP											
11...	200	79	48	47	20	19	19	20	4.7	4.2	117

ILLINOIS RIVER BASIN

05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
27...	91	60	0.7	405	47	9	4.00	0.100	0.001	1.8	1.9
NOV											
02...	83	70	0.5	388	38	4	3.10	<0.100	<0.001	--	1.5
28...	200	36	0.2	557	39	5	0.680	0.110	<0.001	0.39	0.50
JAN											
11...	120	120	0.3	543	75	10	6.20	0.430	0.002	1.4	1.8
FEB											
16...	130	90	0.4	521	89	10	6.20	0.460	0.003	1.2	1.7
MAR											
14...	110	130	0.5	533	9	3	5.70	1.00	0.010	1.2	2.2
APR											
12...	100	70	0.3	419	148	--	9.20	0.460	0.005	1.2	1.7
MAY											
09...	120	94	0.5	496	60	--	4.10	0.180	0.012	0.82	1.0
09...	120	90	0.5	490	58	11	4.10	0.160	0.007	0.44	0.60
JUN											
06...	66	48	0.3	293	82	--	6.50	0.260	0.002	1.3	1.6
13...	83	49	0.3	250	33	6	6.10	0.210	0.011	0.89	1.1
JUL											
11...	110	79	0.5	456	85	--	1.90	0.400	0.040	1.4	1.8
AUG											
15...	77	69	0.4	360	56	--	1.60	0.440	0.017	1.4	1.8
SEP											
11...	45	34	0.2	240	69	--	3.60	0.150	0.003	0.75	0.90

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
OCT											
27...	5.9	0.560	0.410	1700	<50	3	50	31	<0.5	<0.5	200
NOV											
02...	4.6	0.320	0.260	1200	<50	2	40	29	<0.5	<0.5	170
28...	1.2	0.120	0.050	1400	70	1	90	70	<0.5	<0.5	110
JAN											
11...	8.0	0.310	0.210	880	80	1	60	45	<0.5	<0.5	110
FEB											
16...	7.9	0.320	0.240	2300	<50	2	50	38	<0.5	<0.5	130
MAR											
14...	7.9	0.380	0.290	730	60	<1	10	8	<0.5	<0.5	120
APR											
12...	11	0.420	0.190	2100	150	1	60	39	<0.5	<0.5	110
MAY											
09...	5.1	0.400	0.210	1000	80	2	50	42	<0.5	<0.5	170
09...	4.7	0.420	0.210	1300	230	3	50	42	<0.5	<0.5	180
JUN											
06...	8.1	0.250	0.050	3400	1100	2	70	47	<0.5	<0.5	100
13...	7.2	0.340	0.110	3900	960	3	80	50	<0.5	<0.5	110
JUL											
11...	3.7	0.330	0.220	1300	60	3	70	52	<0.5	<0.5	140
AUG											
15...	3.4	0.230	0.170	890	<50	3	50	39	<0.5	<0.5	120
SEP											
11...	4.5	0.430	0.190	2200	<50	2	60	40	<0.5	<0.5	100

05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
OCT										
27...	190	<3	<3	<5	<5	<5	<5	<5	<5	2600
NOV										
02...	160	<3	<3	5	<5	<5	<5	6	<5	1700
28...	100	<3	<3	8	7	<5	<5	6	<5	2000
JAN										
11...	110	<3	<3	8	<5	<5	<5	6	<5	1500
FEB										
16...	130	<3	<3	14	<5	<5	<5	6	<5	3100
MAR										
14...	120	<3	<3	<5	<5	<5	<5	<5	<5	1100
APR										
12...	100	<3	<3	11	<5	<5	<5	8	<5	3000
MAY										
09...	170	--	--	8	5	<5	<5	7	<5	1500
09...	170	--	--	9	6	<5	<5	5	<5	1700
JUN										
06...	100	<3	<3	8	<5	<5	<5	11	5	3300
13...	100	<3	<3	12	--	<5	<5	13	11	4600
JUL										
11...	140	<3	3	<5	<5	<5	<5	5	<5	1700
AUG										
15...	120	<3	<3	<5	<5	<5	<5	<5	<5	1400
SEP										
11...	100	<3	<3	7	<5	<5	<5	8	<5	3100

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT										
27...	<50	7	<5	84	<5	0.15	<5	<5	<3	<3.0
NOV										
02...	<50	<5	<5	57	<5	<0.05	14	7	<3	<3.0
28...	<50	<5	<5	160	94	<0.05	10	<5	<3	<3.0
JAN										
11...	<50	6	<5	57	18	0.08	14	10	<3	<3.0
FEB										
16...	<50	6	<5	100	28	<0.05	14	7	<3	<3.0
MAR										
14...	<50	<5	<5	51	17	<0.05	<5	<5	<3	<3.0
APR										
12...	<50	13	<5	99	<5	<0.05	10	7	<3	<3.0
MAY										
09...	<50	<5	<5	98	<5	0.06	10	8	<3	<3.0
09...	<50	<5	<5	100	<5	<0.05	10	<5	<3	<3.0
JUN										
06...	<50	6	<5	83	<5	<0.05	8	<5	<3	<3.0
13...	370	9	<5	170	27	0.06	11	--	<3	<3.0
JUL										
11...	<50	6	<5	120	<5	<0.05	6	<5	<3	<3.0
AUG										
15...	<50	5	<5	120	15	<0.05	<5	<5	<3	<3.0
SEP										
11...	<50	6	<5	81	<5	<0.05	15	10	<3	<3.0

05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
27...	270	250	93	43	<100	<100	8.8	<0.005	<5	<1
NOV										
02...	250	250	8	6	<100	<100	9.0	<0.005	<5	1
28...	250	240	<5	<5	<50	<50	8.8	--	--	1
JAN										
11...	290	280	<5	<5	<50	<50	7.9	<0.005	<5	1
FEB										
16...	310	310	<5	<5	<100	<100	8.2	<0.005	5	<1
MAR										
14...	260	260	<5	<5	<50	<50	7.3	<0.005	<5	3
APR										
12...	270	240	<5	<5	<100	<100	--	<0.005	<5	--
MAY										
09...	290	290	<5	<5	<50	<50	--	<0.005	<5	--
09...	290	280	6	<5	<50	<50	8.7	<0.005	<5	1
JUN										
06...	180	170	8	<5	<50	<50	--	0.005	<5	--
13...	210	190	9	<5	<100	<100	9.8	0.005	<5	<1
JUL										
11...	260	260	<5	<5	<50	<50	--	0.005	<5	--
AUG										
15...	260	250	<5	<5	<50	<50	--	<0.005	<5	--
SEP										
11...	170	170	7	<5	<100	<100	--	<0.005	<5	--

05567500 MACKINAW RIVER NEAR CONGERVILLE, IL

LOCATION.--Lat 40°37'25", long 89°14'30", in NE1/4SW1/4 sec.17, T.25 N., R.1 W., Woodford County, Hydrologic Unit 07130004, on right bank at downstream side of bridge on U.S. Highway 150, 900 ft downstream from Norfolk and Western Railway bridge, 0.2 mi downstream from Walnut Creek, 2 mi northwest of Congerville, and at mile 58.7.

DRAINAGE AREA.--767 mi^2.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WSP 1175: 1948. WSP 1308: 1945(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 607.01 ft above National Geodetic Vertical Datum of 1929. Prior to July 11, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at site.

AVERAGE DISCHARGE.--45 years, 506 ft^3/s, 8.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft^3/s, Dec. 4, 1982, gage height, 20.21 ft, from floodmark; minimum, 0.2 ft^3/s, Oct. 21-24, Oct. 27 to Nov. 3, 1956, Oct. 6, 1957, Oct. 8-10, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 27	1615	*1,310	*4.99				

Minimum discharge, 0.88 ft^3/s, Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.9	14	64	45	e22	86	125	204	43	6.9	18
2	2.2	4.1	11	62	43	e23	87	113	181	37	5.8	43
3	2.1	5.3	11	51	41	e24	114	112	170	33	5.0	40
4	2.0	10	11	43	35	89	302	111	165	33	4.4	39
5	2.0	8.7	11	38	31	141	476	108	163	34	3.6	35
6	2.0	6.7	9.0	39	e29	277	359	107	146	31	4.8	28
7	2.0	6.1	8.3	49	e28	336	275	102	135	26	4.9	74
8	2.0	7.0	7.4	59	e27	201	249	93	127	22	5.5	193
9	1.8	7.6	7.4	80	e26	174	246	99	119	20	3.8	719
10	1.8	19	7.5	293	e25	157	267	107	112	18	4.5	582
11	1.8	30	6.4	218	e25	159	235	102	104	16	3.5	401
12	1.8	25	6.2	151	e24	173	212	90	98	14	5.3	234
13	1.8	20	6.6	116	e23	161	201	84	102	13	6.5	162
14	1.8	16	6.8	100	e25	135	187	85	110	12	3.8	162
15	1.8	18	6.1	78	e26	128	178	86	94	10	3.6	173
16	2.0	26	6.0	80	e27	136	175	83	87	9.6	1.7	154
17	2.2	42	5.8	72	e27	113	166	79	82	8.4	1.9	140
18	3.0	26	5.4	65	e26	106	162	75	79	6.3	2.7	115
19	3.0	19	6.1	63	e26	107	157	75	74	11	3.2	95
20	2.7	22	7.6	60	e25	112	150	103	70	14	4.2	82
21	2.7	18	6.9	45	e23	106	140	370	67	66	1.4	72
22	2.6	17	10	67	e22	106	137	247	64	72	2.1	66
23	3.7	31	26	45	e21	97	153	187	60	69	3.8	56
24	3.8	34	129	56	e20	91	145	166	144	49	3.9	50
25	3.0	26	204	48	e21	87	136	154	158	32	4.7	44
26	3.5	25	131	46	e20	87	131	201	109	22	3.7	42
27	3.3	24	89	42	e21	85	140	1150	88	17	6.1	38
28	3.4	20	65	44	e21	89	147	729	88	13	4.8	35
29	3.3	17	70	50	---	94	150	417	72	9.5	4.5	31
30	4.3	16	71	48	---	102	139	314	54	8.7	4.0	31
31	4.4	---	69	47	---	90	---	247	---	7.3	7.0	---
TOTAL	79.7	550.4	1031.5	2319	753	3808	5702	6121	3326	776.8	131.6	3954
MEAN	2.57	18.3	33.3	74.8	26.9	123	190	197	111	25.1	4.25	132
MAX	4.4	42	204	293	45	336	476	1150	204	72	7.0	719
MIN	1.8	3.9	5.4	38	20	22	86	75	54	6.3	1.4	18
CFSM	.00	.02	.04	.10	.04	.16	.25	.26	.14	.03	.01	.17
IN.	.00	.03	.05	.11	.04	.18	.28	.30	.16	.04	.01	.19

CAL YR 1988 TOTAL 55085.37 MEAN 151 MAX 2250 MIN .22 CFSM .20 IN. 2.67
WTR YR 1989 TOTAL 28553.0 MEAN 78.2 MAX 1150 MIN 1.4 CFSM .10 IN. 1.38

e Estimated

05567510 MACKINAW RIVER BELOW CONGERVILLE, IL

LOCATION.--Lat 40°35'12", long 89°16'42", in NW1/4NE1/4 sec.36, T.25 N., R.2 W., Tazewell County, Hydrologic Unit 07130004, at Rocky Ford bridge, 0.5 mi upstream from Rock Creek, 0.8 mi upstream from Hollands Creek, 4.5 mi southwest of Congerville, and at mile 53.7.

DRAINAGE AREA.--776 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV											
02...	1000	17002	17002	5.3	661	7.40	6.0	13	8.7	9	K10
DEC											
05...	1200	17002	17002	11	715	7.60	2.0	5.6	12.9	15	K16
JAN											
23...	1300	17002	17002	45	712	7.90	0.0	2.4	14.7	5	<2
FEB											
23...	1000	17002	17002	21	773	7.60	0.0	0.70	14.3	6	K2
APR											
11...	1000	17002	17002	235	714	7.90	5.0	2.5	12.6	8	K20
MAY											
11...	1000	17002	17002	102	762	8.00	13.5	4.1	9.6	11	170
JUN											
14...	1000	17002	17002	110	772	8.20	21.5	2.4	8.0	13	160
AUG											
16...	1300	17002	17002	1.7	543	7.90	22.5	13	5.6	17	K220

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
NOV											
02...	360	79	77	76	42	41	10	9.9	1.5	1.5	280
DEC											
05...	320	83	69	70	35	35	34	35	3.5	3.5	236
JAN											
23...	330	130	76	76	34	34	18	19	1.0	0.99	201
FEB											
23...	390	160	87	87	42	42	22	22	1.5	1.5	234
APR											
11...	350	160	81	80	36	36	12	12	1.0	0.76	187
MAY											
11...	380	160	84	82	42	42	21	21	0.7	1.0	217
JUN											
14...	400	400	94	93	41	41	13	13	0.3	1.1	--
AUG											
16...	280	60	58	56	34	33	11	12	1.7	1.6	216

05567510 MACKINAW RIVER BELOW CONGERVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
NOV											
02...	54	5	1	1.10	<0.100	<0.001	0.030	<0.010	120	<50	50
DEC											
05...	79	14	2	2.40	<0.100	<0.001	0.150	0.120	280	50	50
JAN											
23...	83	4	1	13.0	<0.100	<0.001	0.060	0.050	150	<50	60
FEB											
23...	92	2	1	9.90	<0.100	<0.001	0.060	0.040	100	70	50
APR											
11...	73	16	3	19.0	0.110	0.001	0.040	0.030	400	140	50
MAY											
11...	82	20	7	10.0	<0.100	<0.002	0.060	0.040	460	140	60
JUN											
14...	73	21	6	15.0	<0.100	<0.007	0.070	0.030	2100	1300	90
AUG											
16...	62	76	17	0.170	<0.100	<0.004	0.010	<0.010	590	<50	70

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
NOV										
02...	48	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
DEC										
05...	53	<0.5	<0.5	90	--	<3	<3	<5	<5	<5
JAN										
23...	56	<0.5	<0.5	50	50	<3	<3	<5	<5	<5
FEB										
23...	53	<0.5	<0.5	60	--	<3	<3	13	6	<5
APR										
11...	51	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAY										
11...	58	<0.5	<0.5	60	60	<3	<3	5	7	<5
JUN										
14...	78	<0.5	<0.5	60	50	<3	<3	7	<5	<5
AUG										
16...	59	<0.5	<0.5	50	50	<3	<3	<5	<5	<5

05567510 MACKINAW RIVER BELOW CONGERVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV										
02...	<5	<5	<5	190	<50	<5	<5	91	74	<0.05
DEC										
05...	<5	<5	<5	320	<50	<5	<5	49	32	<0.05
JAN										
23...	<5	<5	<5	190	<50	<5	<5	16	7	<0.05
FEB										
23...	<5	<5	<5	150	<50	<5	<5	21	18	<0.05
APR										
11...	<5	<5	<5	360	<50	<5	<5	32	6	<0.05
MAY										
11...	<5	<5	<5	540	<50	<5	<5	54	16	<0.05
JUN										
14...	<5	<5	<5	1100	<50	<5	<5	63	12	<0.05
AUG										
16...	<5	<5	<5	810	<50	<5	<5	220	29	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV										
02...	<5	<5	<3	<3.0	140	140	<5	<5	130	--
DEC										
05...	8	<5	<3	<3.0	160	--	<5	<5	<50	<50
JAN										
23...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
FEB										
23...	11	<5	<3	<3.0	170	170	<5	<5	<50	<50
APR										
11...	<5	<5	<3	<3.0	140	140	<5	<5	<50	<50
MAY										
11...	<5	<5	<3	<3.0	170	170	<5	<5	<50	<50
JUN										
14...	<5	<5	<3	<3.0	170	170	5	<5	<50	<50
AUG										
16...	<5	<5	<3	<3.0	140	130	<5	<5	<50	<50

05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL

LOCATION.--Lat 40°27'15", long 89°36'22", in SE1/4SE1/4 sec.15, T.23 N., R.5 W., Tazewell County, Hydrologic Unit 07130004, on right downstream side of bridge on Towerline Road, 2 mi upstream from State Highway 29, 7 mi south of Pekin, 10.2 mi north of U.S. Highway 136, and at mile 17.3.

DRAINAGE AREA.--1,073 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to October 1956 and annual maximum, water years 1957-88, October 1988 to September 1989.

GAGE.--Water-stage recorder. Datum of gage is 477.10 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 17, 1933, chain gage at site 1.9 mi downstream on Chicago and North Western Railway bridge at datum 2.00 ft higher. Jan. 17, 1933, to May 13, 1940, chain gage, and May 14, 1940, to Sept. 30, 1952, wire-weight gage at site 2 mi downstream at datum 2.00 ft higher. Oct. 1, 1952, to Oct. 31, 1956, wire-weight gage, and Nov. 1, 1956, to Sept. 30, 1988, crest-stage gage at site 2 mi downstream at present datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--36 years (1921-56, 1989), 672 ft^3/s, 8.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,000 ft^3/s, Dec. 6, 1982, gage height, 16.13 ft; maximum gage height, 16.56 ft, May 28, 1989; minimum discharge observed, 17 ft^3/s, Oct. 26, 27, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 18	1015	*1,830	*16.56				

Minimum discharge, 19 ft^3/s, Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	20	38	102	79	37	102	181	358	74	34	46
2	30	20	37	102	77	e35	100	163	293	62	39	52
3	32	20	36	102	76	e50	129	148	257	53	35	36
4	27	20	34	80	59	102	171	139	234	48	33	47
5	23	23	32	84	59	112	311	146	219	45	31	49
6	23	29	31	84	57	106	380	139	212	43	30	49
7	23	29	30	84	54	133	336	132	180	41	29	79
8	23	26	29	60	54	186	273	133	162	40	28	81
9	23	26	29	67	51	171	242	140	149	37	26	938
10	23	46	28	81	48	184	241	151	137	36	27	1420
11	23	52	28	138	48	188	278	133	130	32	32	981
12	23	35	27	175	47	188	294	131	122	30	28	663
13	23	35	27	150	48	200	240	119	117	28	26	448
14	23	40	27	149	48	195	253	109	111	28	25	317
15	23	40	27	143	e49	159	235	106	115	27	25	254
16	22	74	27	115	e49	145	219	108	108	27	26	267
17	22	69	27	122	e50	145	212	109	99	27	25	233
18	22	42	27	127	e50	140	199	105	90	27	23	208
19	22	43	27	105	e50	122	193	106	85	29	24	180
20	22	49	27	98	e47	118	185	125	79	34	26	154
21	22	45	28	87	e45	119	174	121	75	45	25	124
22	22	39	31	71	e42	120	163	431	70	59	30	117
23	21	38	56	86	e41	116	360	343	66	101	47	104
24	21	37	53	88	e40	111	359	259	61	54	54	95
25	21	37	42	85	e39	103	241	227	99	27	40	95
26	21	40	145	86	e37	102	198	232	158	67	38	84
27	21	49	169	83	e40	98	192	366	124	57	48	72
28	21	48	128	78	e39	103	241	1610	99	46	31	62
29	21	44	91	77	---	112	225	981	84	39	38	59
30	20	40	113	77	---	100	198	599	88	40	32	65
31	20	---	104	79	---	101	---	456	---	37	44	---
TOTAL	709	1155	1555	3065	1423	3901	6944	8248	4181	1340	999	7379
MEAN	22.9	38.5	50.2	98.9	50.8	126	231	266	139	43.2	32.2	246
MAX	32	74	169	175	79	200	380	1610	358	101	54	1420
MIN	20	20	27	60	37	35	100	105	61	27	23	36
CFSM	.02	.04	.05	.09	.05	.12	.22	.25	.13	.04	.03	.23
IN.	.02	.04	.05	.11	.05	.14	.24	.29	.14	.05	.03	.26

WTR YR 1989 TOTAL 40899 MEAN 112 MAX 1610 MIN 20 CFSM .10 IN. 1.42

e Estimated

05568005 MACKINAW RIVER BELOW GREEN VALLEY, IL

LOCATION.--Lat 40°26'51", long 89°41'28", in NE1/4 sec.17, T.23 N., R.5 W., Tazewell County, Hydrologic Unit 07130004, at county road bridge, 1.8 mi upstream from small left-bank tributary, 3.8 mi northwest of Green Valley, and at mile 10.1.

DRAINAGE AREA.--1,092 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water discharges were determined from Mackinaw River near Green Valley (station 05568000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
27...	0900	17002	17002	21	700	7.60	8.0	3.9	10.8	7	K20
NOV											
28...	1000	17002	17002	48	726	7.60	4.0	5.1	12.8	9	85
JAN											
11...	1000	17002	17002	138	763	7.50	1.0	22	13.7	7	<5
FEB											
16...	1300	17002	17002	49	732	8.10	2.0	2.7	14.8	6	<2
MAR											
14...	0930	17002	17002	195	642	7.70	7.5	2.4	12.3	10	K8
MAY											
09...	1000	17002	17002	140	719	7.70	13.0	6.5	9.3	11	K180
JUN											
13...	0900	17002	17002	117	730	8.20	21.5	4.0	9.9	18	K60
AUG											
16...	0930	17002	17002	26	632	7.80	21.5	6.2	7.0	19	480
SEP											
21...	0900	17002	17002	125	795	8.40	18.5	1.6	8.4	14	200

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)
OCT											
27...	360	44	82	83	37	37	22	22	1.6	1.6	316
NOV											
28...	320	18	72	73	34	34	35	35	2.5	2.4	305
JAN											
11...	330	78	78	76	35	35	28	28	1.8	1.7	256
FEB											
16...	370	86	83	82	40	39	24	24	1.7	1.6	280
MAR											
14...	310	120	76	73	32	32	17	17	1.6	1.5	190
MAY											
09...	340	98	79	75	38	37	20	20	1.9	1.7	242
JUN											
13...	370	370	86	84	40	39	16	16	1.9	1.6	--
AUG											
16...	330	31	77	71	37	36	18	18	1.6	--	295
SEP											
21...	390	120	95	92	41	40	22	22	2.9	2.6	278

05568005 MACKINAW RIVER BELOW GREEN VALLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
OCT 27...	38	3	2	0.720	<0.100	<0.001	0.010	<0.010	<50	<50	90
NOV 28...	37	5	2	1.10	0.130	<0.001	0.080	0.040	260	70	90
JAN 11...	68	5	2	8.00	<0.100	<0.001	0.088	0.040	140	80	80
FEB 16...	60	2	1	5.00	0.140	0.002	0.080	0.020	140	<50	70
MAR 14...	70	4	3	9.90	<0.100	<0.001	0.080	0.050	210	<50	30
MAY 09...	65	86	8	5.80	0.140	0.002	0.170	0.150	1300	210	90
JUN 13...	60	37	7	10.0	<0.100	<0.007	0.090	0.010	2200	1100	100
AUG 16...	43	71	11	<0.100	<0.100	<0.003	0.080	<0.010	810	<50	100
SEP 21...	58	66	7	8.70	<0.100	<0.009	0.110	0.050	1600	80	100

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)
OCT 27...	86	<0.5	<0.5	70	70	<3	<3	<5	<5	<5
NOV 28...	81	<0.5	<0.5	80	--	<3	<3	6	7	<5
JAN 11...	76	<0.5	<0.5	70	70	<3	<3	6	<5	<5
FEB 16...	67	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
MAR 14...	23	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAY 09...	77	<0.5	<0.5	60	60	--	--	8	7	<5
JUN 13...	85	<0.5	<0.5	60	--	<3	<3	<5	<5	<5
AUG 16...	95	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
SEP 21...	110	<0.5	<0.5	90	--	<3	<3	12	<5	<5

05568005 MACKINAW RIVER BELOW GREEN VALLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT										
27...	<5	<5	<5	350	57	<5	<5	93	80	<0.05
NOV										
28...	<5	<5	<5	510	<50	<5	<5	140	110	<0.05
JAN										
11...	<5	<5	<5	470	<50	<5	<5	98	86	<0.05
FEB										
16...	<5	<5	<5	660	92	<5	<5	160	140	<0.05
MAR										
14...	<5	<5	<5	460	<50	<5	<5	100	71	<0.05
MAY										
09...	<5	<5	<5	2200	<50	<5	<5	200	42	<0.05
JUN										
13...	<5	<5	<5	1300	<50	<5	<5	110	13	0.06
AUG										
16...	<5	<5	<5	1600	<50	<5	<5	270	100	<0.05
SEP										
21...	<5	<5	<5	2100	<50	<5	<5	150	21	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
27...	<5	<5	<3	<3.0	160	160	5	<5	<50	<50
NOV										
28...	7	<5	<3	<3.0	160	160	<5	<5	<50	<50
JAN										
11...	32	7	<3	<3.0	170	160	<5	<5	<50	<50
FEB										
16...	7	<5	<3	<3.0	170	170	<5	<5	<50	<50
MAR										
14...	<5	<5	<3	<3.0	130	120	<5	<5	<50	<50
MAY										
09...	<5	<5	<3	<3.0	160	150	<5	<5	<50	<50
JUN										
13...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
AUG										
16...	<5	<5	<3	<3.0	170	160	<5	<5	<50	<50
SEP										
21...	9	5	<3	<3.0	210	200	<5	<5	<50	<50

ILLINOIS RIVER BASIN

05568500 ILLINOIS RIVER AT KINGSTON MINES, IL

LOCATION.--Lat 40°33'10", long 89°46'40", in SE1/4SE1/4 sec.26, T.7 N., R.6 E., Peoria County, Hydrologic Unit 07130003, on right bank at Kingston Mines, 2.3 mi downstream from Mackinaw River and at mile 144.4.

DRAINAGE AREA.--15,818 mi^2.

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1558: 1957. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 428.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1940, nonrecording gage at same site at datum 1.65 ft higher. Oct. 1, 1940, to Mar. 31, 1942, nonrecording gage at present site and datum. Auxiliary water-stage recorder downstream from mouth of Copperas Creek, 8.4 mi downstream. Prior to Oct. 30, 1967, auxiliary water stage recorder at mouth of Copperas Creek, 7.9 mi downstream.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation at low flow by navigation dams at Peoria and La Grange. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at site and at auxiliary site, 8.4 mi downstream.

AVERAGE DISCHARGE.--50 years, 15,154 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,800 ft^3/s, Dec. 7, 1982; maximum gage height, 26.02 ft, May 25, 1943; minimum daily discharge, 1,700 ft^3/s, Aug. 29 to Sept. 1, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,500 ft^3/s, Sept. 18; maximum gage height, 15.15 ft, Sept. 18; minimum daily discharge, 4,900 ft^3/s, July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5590	5990	8590	10000	e8400	e6920	11800	8850	16600	7010	e5200	e7000
2	5670	e5950	8380	10500	e8800	e6590	11800	8830	19800	7040	e6400	e8000
3	5000	5920	8540	10600	e9000	e6310	11900	6740	21500	7530	e9000	e14000
4	6260	7550	6050	e10300	e8800	6890	11900	7500	24200	7920	e8000	e16000
5	5710	6970	6120	10100	e9000	7960	11700	7660	26200	8410	e7600	e17000
6	e5890	6680	5560	10800	e7000	9600	13300	7680	26800	8290	e7400	e15000
7	e5700	6390	e5800	11500	e5500	10500	17500	7810	26200	6550	e8400	e17000
8	5660	7180	7710	10900	e5400	11000	20400	7820	25300	6510	e8700	e23000
9	6560	8600	6480	10800	e5800	12100	19800	8050	24600	e6800	e8900	e25000
10	5610	e8650	7090	10800	e6400	12700	19200	7360	23400	e6900	e9200	e25500
11	4910	8970	5630	12300	e5700	12900	18100	7750	21800	e6300	e9500	e27000
12	5310	9120	7000	13300	e6000	13300	16200	7880	20500	e5200	e9500	e28000
13	4990	e10000	e7000	17000	e6500	14100	9420	6470	19600	e6500	e8000	e29000
14	e5900	10900	e7200	24700	e6400	14500	9690	6510	18700	e5500	e7200	e30000
15	e6000	11100	e7200	20700	e7500	14100	9410	6320	18100	e6400	e8000	e30500
16	e6100	11500	7180	15200	e8000	13600	9410	6350	14700	e5200	e7200	e31000
17	e6200	11900	7040	e12000	e6500	14100	9370	6510	10500	e4900	e6200	e31300
18	e6200	13200	7790	e10800	e6400	14200	10400	5960	9870	e5100	e5800	e31500
19	6480	15800	8260	e9800	e5800	13700	9440	7680	9510	e5150	e5200	e31400
20	7640	17400	7660	e7000	e5600	13900	9460	6680	9330	e6400	e5200	e31300
21	6790	15200	7920	e7500	e5500	14000	8930	6730	9500	e8000	e5400	e30500
22	6890	15500	7070	e7700	e5300	13400	9250	7520	8360	e9500	e5600	27400
23	7330	10900	7260	e7600	e6900	13200	8940	8270	7490	e9800	e5700	28100
24	6860	12400	7430	7050	e7590	12400	8580	8040	7980	e11000	e5800	25000
25	6760	12800	9330	6040	e7180	12600	8160	8110	7690	e12000	e6200	26300
26	6380	14500	e9500	e7500	e7380	12200	7960	8390	7340	e11000	e7000	25200
27	e6500	12800	10200	7200	e7340	11900	7860	8570	7010	e10000	e6600	23200
28	6630	8690	10200	e7400	e7420	11700	7740	8360	6980	e9500	e6800	21200
29	6680	e8650	10700	e7200	---	11900	8070	9470	7060	e9200	e8000	14300
30	6370	e8000	e10700	e7000	---	11900	9420	8710	6830	e8500	e7100	e11000
31	6200	---	10800	6690	---	12100	---	11900	---	e8400	e7200	---
TOTAL	190770	309210	243390	327980	193110	366270	345110	242490	463250	236570	226800	700700
MEAN	6154	10310	7851	10580	6897	11820	11500	7822	15440	7631	7316	23360
MAX	7640	17400	10800	24700	9000	14500	20400	11900	26800	12000	9500	31500
MIN	4910	5920	5560	6040	5300	6310	7740	5960	6830	4900	5200	7000

CAL YR 1988 TOTAL 4509990 MEAN 12320 MAX 40400 MIN 4000
WTR YR 1989 TOTAL 3845650 MEAN 10540 MAX 31500 MIN 4900

e Estimated

05568800 INDIAN CREEK NEAR WYOMING, IL

LOCATION.--Lat 41°01'06", long 89°50'07", in SE1/4SE1/4 sec.17, T.12 N., R.6 E., Stark County, Hydrologic Unit 07130005, on left bank at upstream side of county highway bridge, 4.5 mi southwest of Wyoming and at mile 4.9.

DRAINAGE AREA.--62.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 616.78 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--30 years, 46.1 ft^3/s, 9.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,540 ft^3/s, June 22, 1974, gage height, 13.81 ft, from rating curve extended above 1,400 ft^3/s on basis on contracted-opening measurement of peak flow; no flow Sept. 25, 26, and part of each day Oct. 7, 8, 13, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 2	Unknown	800	Unknown	Sept. 6	Unknown	*1,260	*10.00

No flow part of each day Oct. 7, 8, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.85	5.0	e7.5	7.2	e5.8	6.0	4.7	202	e10	.95	365
2	.43	.93	3.2	e5.6	6.4	e12	6.5	5.4	45	e8.5	.85	e600
3	.40	1.1	2.3	e4.5	e5.5	31	7.7	5.1	55	e7.0	.84	e400
4	.84	1.5	e2.1	e5.0	e4.5	83	7.7	4.5	77	e6.2	.83	327
5	.57	3.4	e1.9	e6.5	e4.0	108	6.0	4.8	48	e5.5	.96	e300
6	.27	2.6	e1.7	e10	e3.3	74	5.2	4.5	e27	e5.0	.84	e900
7	.14	2.1	e1.6	e15	e3.0	63	4.6	4.7	e21	e4.2	.67	e600
8	.21	1.6	e1.6	e10	e3.4	46	6.0	4.8	e18	e3.7	.64	e350
9	.25	2.2	e1.7	e7.5	e3.9	47	5.6	8.9	e14	e3.2	.63	216
10	.25	3.6	e2.0	e5.0	e3.7	84	4.4	9.0	e10	e2.8	.56	143
11	.16	3.8	e2.4	e4.2	e3.3	98	3.9	7.5	e9.0	e2.5	.46	97
12	.19	5.5	e2.7	e3.5	e3.2	44	3.6	5.9	e12	e2.2	.46	71
13	.42	5.4	e3.0	e3.2	e3.4	21	3.1	e6.0	e11	e2.5	.38	63
14	.58	4.1	e2.7	e3.0	e3.7	16	3.1	e5.0	e48	2.9	.44	56
15	.15	3.4	e2.4	e2.8	e4.0	14	3.0	e4.5	e40	1.9	.35	48
16	.09	8.4	e2.3	e2.7	e4.4	11	2.9	e4.0	e27	1.7	.37	41
17	.91	8.7	e2.2	e2.6	e4.2	e9.5	2.6	e3.9	e16	1.6	.34	35
18	2.4	4.1	e2.0	e2.6	e3.8	e9.0	2.4	e4.5	e9.0	1.5	.33	31
19	.65	3.2	e1.9	e2.4	e3.6	e8.2	2.4	8.8	e8.0	4.8	.28	28
20	.97	2.7	e1.7	e2.5	e3.4	e7.8	2.3	15	e7.4	e7.6	.47	26
21	.65	2.1	e1.9	e2.8	e3.2	e7.4	2.1	10	e6.2	e6.0	.39	23
22	.80	1.9	e2.1	e3.1	e3.1	7.2	1.7	e8.2	e9.0	5.3	.45	22
23	3.3	1.8	e2.5	e3.3	e3.0	6.8	18	e8.0	e18	3.9	.86	19
24	3.3	1.9	e3.0	e3.9	e3.0	7.2	15	e7.4	e13	2.5	3.2	17
25	4.4	2.2	e3.7	e4.3	e3.0	6.7	7.4	e7.0	e9.0	2.4	2.9	17
26	1.9	6.4	7.4	e4.7	e3.1	6.7	16	e6.6	e7.2	2.1	1.8	16
27	2.3	7.8	15	e5.2	e3.5	6.9	34	e6.2	e11	2.0	1.2	15
28	.98	5.6	17	e6.0	e4.3	8.3	10	e6.0	e16	1.7	5.7	14
29	.72	4.1	15	7.1	---	7.6	7.6	e5.8	e18	2.5	2.8	14
30	.66	2.9	12	9.5	---	6.7	5.6	e5.8	e12	1.5	1.7	14
31	.72	---	e9.8	8.6	---	6.0	---	18	---	1.0	64	---
TOTAL	30.36	105.88	135.8	164.6	108.1	869.8	206.4	211.5	823.8	116.2	96.65	4868
MEAN	.98	3.53	4.38	5.31	3.86	28.1	6.88	6.82	27.5	3.75	3.12	162
MAX	4.4	8.7	17	15	7.2	108	34	18	202	10	64	900
MIN	.09	.85	1.6	2.4	3.0	5.8	1.7	3.9	6.2	1.0	.28	14
CFSM	.02	.06	.07	.08	.06	.45	.11	.11	.44	.06	.05	2.59
IN.	.02	.06	.08	.10	.06	.52	.12	.13	.49	.07	.06	2.89

CAL YR 1988 TOTAL 11026.14 MEAN 30.1 MAX 1070 MIN .00 CFSM .46 IN. 6.54
WTR YR 1989 TOTAL 7737.09 MEAN 21.2 MAX 900 MIN .09 CFSM .34 IN. 4.59

e Estimated

05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
25...	1100	17002	17002	4.8	895	7.50	6.5	3.2	9.9	31	280
NOV											
29...	0930	17002	17002	4.0	711	7.70	1.5	3.9	15.7	15	K30
JAN											
04...	0930	17002	17002	5.0	1030	7.80	0.0	4.5	18.6	13	K8
FEB											
08...	1030	17002	17002	3.4	1010	7.90	0.0	0.80	15.9	16	K2
MAR											
22...	1000	17002	17002	6.3	765	8.00	4.5	--	15.7	12	60
APR											
26...	1000	17002	17002	5.4	757	7.90	20.0	6.4	8.3	25	K40
JUN											
21...	1000	17002	17002	6.2	800	8.00	23.5	1.6	8.2	14	K50
AUG											
03...	0930	17002	17002	0.96	770	7.90	25.0	7.3	8.2	22	1000
SEP											
22...	0945	17002	17002	19	770	7.70	16.5	4.0	8.6	7	520

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
25...	280	13	61	59	33	32	86	86	6.5	6.3	267
NOV											
29...	350	84	80	79	37	36	27	27	4.6	4.5	262
JAN											
04...	360	59	81	81	39	38	84	84	4.2	4.2	300
FEB											
08...	370	51	83	85	38	38	71	72	3.8	3.9	318
MAR											
22...	340	90	82	78	38	36	36	36	1.2	0.54	254
APR											
26...	330	76	76	75	34	34	33	33	4.5	4.6	252
JUN											
21...	370	100	88	87	38	38	34	34	1.6	1.1	272
AUG											
03...	310	--	67	67	34	--	47	46	3.2	3.9	294
SEP											
22...	400	120	97	96	40	40	19	19	1.4	1.2	285

05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
OCT											
25...	75	8	4	0.400	0.340	0.002	0.350	0.260	290	<50	90
NOV											
29...	76	2	2	1.00	--	--	0.120	0.080	210	<50	90
JAN											
04...	94	3	2	1.60	0.340	0.002	0.240	0.210	170	70	100
FEB											
08...	99	2	1	1.50	0.450	0.003	0.220	0.180	90	<50	70
MAR											
22...	84	4	2	10.0	0.110	0.001	0.100	0.070	360	210	80
APR											
26...	81	14	2	2.20	0.670	0.021	0.230	0.170	530	120	100
JUN											
21...	69	9	2	4.60	<0.100	<0.005	0.180	0.110	1500	220	200
AUG											
03...	51	34	6	0.140	<0.100	<0.005	0.140	0.070	800	60	100
SEP											
22...	53	23	4	9.70	<0.100	<0.002	0.123	0.100	890	<50	200

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT										
25...	87	<0.5	<0.5	220	220	<3	<3	<5	<5	<5
NOV										
29...	84	<0.5	<0.5	50	50	<3	<3	<5	<5	<5
JAN										
04...	92	<0.5	<0.5	160	160	<3	<3	6	<5	<5
FEB										
08...	72	<0.5	<0.5	150	--	<3	<3	<5	<5	<5
MAR										
22...	78	<0.5	<0.5	80	80	<3	<3	<5	<5	<5
APR										
26...	100	<0.5	<0.5	90	90	--	--	7	<5	<5
JUN										
21...	140	<1.0	<1	90	90	<3	<3	<5	<5	<5
AUG										
03...	120	<0.5	<0.5	130	120	<3	<3	<5	<5	<5
SEP										
22...	140	<0.5	<0.5	60	70	<3	<3	<5	<5	<5

05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT 25...	<5	<5	<5	580	77	<5	<5	210	160	<0.05
NOV 29...	<5	<5	<5	250	<50	<5	<5	120	110	<0.05
JAN 04...	<5	<5	<5	260	<50	<5	<5	150	150	0.56
FEB 08...	<5	<5	<5	240	66	<5	<5	290	290	<0.05
MAR 22...	<5	<5	<5	420	110	<5	<5	290	270	<0.05
APR 26...	<5	<5	<5	860	53	<5	<5	570	450	<0.05
JUN 21...	<5	<5	<5	1600	<50	<5	<5	310	220	<0.05
AUG 03...	<5	<5	<5	1100	<50	<5	<5	640	510	<0.05
SEP 22...	<5	<5	<5	1100	<50	<5	<5	170	130	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 25...	8	<5	<3	<3.0	180	180	<10	<10	<50	<50
NOV 29...	<5	<5	<3	<3.0	150	150	<5	<5	<50	<50
JAN 04...	<5	<5	<3	<3.0	210	210	<5	<5	<50	<50
FEB 08...	<5	<5	<3	<3.0	200	--	<5	<5	<50	<50
MAR 22...	<5	<5	<3	<3.0	180	170	<5	<5	<50	<50
APR 26...	<5	<5	<3	<3.0	160	160	7	5	<50	<50
JUN 21...	<5	<5	<3	<3.0	190	180	<5	<5	<50	<50
AUG 03...	<5	<5	<3	<3.0	170	170	6	6	<100	<100
SEP 22...	<5	<5	<3	<3.0	200	200	<5	<5	<50	<50

05569500 SPOON RIVER AT LONDON MILLS, IL

LOCATION.--Lat 40°42'32", long 90°16'53", in SW1/4NE1/4 sec.4, T.8 N., R.2 E., Fulton County, Hydrologic Unit 07130005, on left bank at downstream side of bridge on State Highway 116, 0.2 mi downstream from Chicago and North Western Railroad bridge, 0.5 mi west of London Mills, 0.5 mi upstream from Cedar Creek, 4.0 mi downstream from Littlers Creek, and at mile 69.2.

DRAINAGE AREA.--1,072 mi^2. Area at site used prior to April 26, 1984, 1,062 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 1175: 1947. WDR IL-84-2: 1948(M), 1950(M), 1951, 1954(M), 1955, 1958, 1960, 1962, 1964, 1965, 1970, and drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 508.97 ft above National Geodetic Vertical Datum of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum. July 14, 1945, to Apr. 26, 1984, at site 0.9 mi upstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--47 years, 703 ft^3/s, 8.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft^3/s, June 23, 1974, gage height, 28.03 ft, from graph based on gage readings; minimum, 2.6 ft^3/s, Sept. 16, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 26, 1924, reached a stage of 27.08 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 7	1830	*4,210	*11.85				

Minimum discharge, 3.3 ft^3/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	16	70	e66	75	e30	84	152	366	66	17	40
2	45	16	58	e56	72	e32	81	134	1580	54	14	1800
3	31	21	53	e50	e48	e36	93	128	521	55	13	1790
4	22	20	e46	e44	e40	178	130	121	279	52	12	673
5	18	36	e43	56	e30	420	145	119	320	44	10	239
6	15	31	e38	67	e34	540	127	106	224	46	10	533
7	13	25	e34	85	e37	507	108	100	156	40	8.2	3680
8	12	27	e31	96	e35	e372	109	94	120	33	6.9	3940
9	12	28	e28	166	e32	e256	120	101	99	30	6.1	3770
10	12	39	e26	e140	e30	e203	125	143	89	27	5.7	2880
11	9.7	40	e24	e120	e26	e262	110	148	92	23	5.2	1830
12	9.1	46	e25	e85	e27	e431	100	121	87	20	4.8	1110
13	7.9	57	e27	e70	e30	e443	88	101	95	17	4.9	800
14	7.2	61	e22	e60	e32	e304	83	89	233	17	4.8	633
15	7.1	60	e20	e52	e34	e218	80	82	309	18	5.0	572
16	9.5	71	e19	e46	e37	184	75	77	161	28	5.0	486
17	6.2	76	e20	e44	e36	155	74	70	112	25	4.3	407
18	10	85	e22	e40	e35	136	72	68	94	20	4.8	350
19	10	82	e23	e38	e33	126	74	69	82	21	3.7	302
20	9.9	67	e25	e36	e32	e118	71	90	73	22	3.5	264
21	29	49	e27	e36	e31	e105	70	100	66	25	4.7	240
22	22	48	e28	e37	e31	e96	68	90	60	30	5.3	218
23	22	52	e30	e39	e30	e90	161	78	55	31	12	198
24	20	48	e33	e41	e30	e84	517	73	55	35	9.7	184
25	17	45	e36	e43	e29	97	379	71	136	46	26	166
26	17	58	e43	e45	e29	94	247	72	78	39	23	152
27	30	70	e50	e48	e28	94	191	69	113	30	29	151
28	39	83	e62	e52	e29	98	322	65	140	25	24	143
29	29	82	e70	68	---	98	239	67	101	21	19	132
30	23	80	e90	73	---	97	187	64	91	21	17	127
31	19	---	e75	77	---	91	---	62	---	22	27	---
TOTAL	586.6	1519	1198	1976	992	5995	4330	2924	5987	983	345.6	27810
MEAN	18.9	50.6	38.6	63.7	35.4	193	144	94.3	200	31.7	11.1	927
MAX	53	85	90	166	75	540	517	152	1580	66	29	3940
MIN	6.2	16	19	36	26	30	68	62	55	17	3.5	40
CFSM	.02	.05	.04	.06	.03	.18	.13	.09	.19	.03	.01	.86
IN.	.02	.05	.04	.07	.03	.21	.15	.10	.21	.03	.01	.97

CAL YR 1988 TOTAL 154565.8 MEAN 422 MAX 7440 MIN 3.0 CFSM .39 IN. 5.36
WTR YR 1989 TOTAL 54646.2 MEAN 150 MAX 3940 MIN 3.5 CFSM .14 IN. 1.90

e Estimated

05569500 SPOON RIVER AT LONDON MILLS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Data formerly published at Spoon River at Route 116 bridge at London Mills (station 05569520) has been included with data for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
24...	1030	17002	17002	22	724	7.30	6.0	11	10.1	24	K40
NOV											
28...	1230	17002	17002	89	932	7.30	3.0	2.9	12.9	20	240
JAN											
03...	1030	17002	17002	50	1080	7.30	0.0	5.4	15.2	14	<5
FEB											
07...	1100	17002	17002	37	958	7.70	0.5	1.1	14.1	13	K5
MAR											
21...	1100	17002	17002	122	806	--	4.0	--	--	11	<2
APR											
21...	0950	81700	80020	70	820	8.60	14.0	--	9.9	--	--
25...	1000	17002	17002	386	801	7.80	19.0	7.2	8.2	31	K180
JUN											
02...	1420	81700	80020	1610	361	7.50	21.0	--	3.7	--	--
20...	1130	17002	17002	76	635	8.00	25.5	3.8	7.6	21	K50
AUG											
02...	1100	17002	17002	16	897	7.60	24.5	14	7.2	28	K160
SEP											
21...	1100	17002	17002	241	818	7.80	19.0	4.7	8.0	14	K340

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT											
24...	300	60	--	65	62	35	34	41	41	3.7	3.3
NOV											
28...	430	200	--	92	93	48	48	48	47	4.9	4.8
JAN											
03...	430	180	--	96	95	47	47	82	79	5.8	5.5
FEB											
07...	370	130	--	83	83	40	40	57	57	3.7	3.6
MAR											
21...	380	160	<1.0	89	88	39	38	34	34	2.4	2.6
APR											
21...	--	--	--	--	--	--	--	--	--	--	--
25...	360	170	--	85	81	39	38	32	32	5.8	5.5
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
20...	290	93	--	71	68	29	28	22	21	4.6	5.4
AUG											
02...	330	89	--	66	66	40	40	67	67	4.1	4.4
SEP											
21...	410	130	--	100	98	42	40	24	24	3.0	2.3

05569500 SPOON RIVER AT LONDON MILLS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
OCT 24...	235	100	15	4	<0.100	--	<0.100	<0.001	0.140	0.040	330
NOV 28...	234	210	5	1	0.360	--	<0.100	<0.001	0.100	0.050	420
JAN 03...	248	190	4	3	1.00	--	<0.100	<0.001	0.060	0.030	150
FEB 07...	245	170	2	1	0.500	--	<0.100	<0.001	0.060	0.040	150
MAR 21...	221	140	6	2	2.90	--	<0.100	--	0.070	0.040	330
APR 21...	--	--	--	--	--	<0.100	--	--	--	--	--
25...	194	170	55	6	1.30	--	0.300	0.007	0.220	0.070	2200
JUN 02...	--	--	--	--	--	5.10	--	--	--	--	--
20...	193	76	65	7	4.90	--	<0.100	<0.006	0.200	0.070	2200
AUG 02...	241	99	50	15	<0.100	--	<0.100	<0.002	0.120	0.030	830
SEP 21...	277	73	163	17	10.0	--	<0.100	<0.002	0.220	0.160	3000

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
OCT 24...	70	100	99	<0.5	<0.5	90	90	<3	<3	<5	<5
NOV 28...	90	100	92	<0.5	<0.5	140	140	<3	<3	5	5
JAN 03...	<50	90	82	<0.5	<0.5	170	160	<3	<3	<5	<5
FEB 07...	<50	50	51	<0.5	<0.5	140	140	<3	<3	<5	<5
MAR 21...	140	80	75	<0.5	<0.5	100	90	<3	<3	<5	<5
APR 21...	--	--	--	--	--	--	--	--	--	--	--
25...	140	100	100	<0.5	<0.5	120	120	--	--	12	8
JUN 02...	--	--	--	--	--	--	--	--	--	--	--
20...	230	100	110	<0.5	<0.5	80	80	<3	<3	<5	6
AUG 02...	<50	200	150	<0.5	<0.5	160	160	<3	<3	6	<5
SEP 21...	80	200	150	<0.5	<0.5	90	80	<3	<3	7	<5

05569500 SPOON RIVER AT LONDON MILLS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT											
24...	<5	<5	<5	<5	540	<50	<5	<5	180	71	<0.05
NOV											
28...	<5	<5	<5	<5	450	<50	<5	<5	100	67	<0.05
JAN											
03...	<5	<5	<5	<5	220	<50	<5	<5	97	80	0.28
FEB											
07...	<5	<5	<5	<5	260	<50	<5	<5	150	140	<0.05
MAR											
21...	<5	<5	<5	<5	430	<50	<5	<5	140	110	<0.05
APR											
21...	--	--	--	--	--	--	--	--	--	--	--
25...	7	<5	6	<5	3700	<50	<5	<5	400	31	<0.05
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
20...	<5	<5	<5	<5	2800	<50	<5	<5	180	35	<0.05
AUG											
02...	<5	<5	<5	<5	1200	<50	<5	<5	480	140	<0.05
SEP											
21...	<5	<5	6	<5	3700	<50	<5	<5	190	17	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
24...	<10	<10	<3	<3.0	190	190	78	--	<50	<50
NOV										
28...	5	<5	<3	<3.0	370	370	<5	<5	<50	<50
JAN										
03...	<5	<5	<3	<3.0	430	420	<5	<5	<50	<50
FEB										
07...	<5	<5	<3	<3.0	380	380	<5	<5	<50	<50
MAR										
21...	<5	<5	<3	<3.0	310	300	<5	<5	<50	<50
APR										
21...	--	--	--	--	--	--	--	--	--	--
25...	13	8	<3	<3.0	280	270	9	<5	<50	<50
JUN										
02...	--	--	--	--	--	--	--	--	--	--
20...	6	7	<3	<3.0	250	230	5	6	<50	<50
AUG										
02...	<5	<5	<3	<3.0	280	280	9	<5	<100	<100
SEP										
21...	8	<5	<3	<3.0	300	290	10	<5	<50	<50

05570000 SPOON RIVER AT SEVILLE, IL
(National stream-quality accounting network station)

LOCATION.--Lat 40°29'08", long 90°20'34", in NE1/4NW1/4 sec.24, T.6 N., R.1 E., Fulton County, Hydrologic Unit 07130005, on right bank at downstream side of bridge on unimproved road, 100 ft upstream from Toledo, Peoria, and Western Railroad bridge, 0.1 mi northeast of Seville, 0.47 mi downstream from State Highway 95, 0.55 mi downstream from Shaw Creek, and at mile 38.7.

DRAINAGE AREA.--1,636 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1208: 1917, 1920, 1922, 1924, 1926-27, 1929(M). WSP 1308: 1919(M), 1936(M), 1938(M), 1942(M), 1945(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 467.04 ft above National Geodetic Vertical Datum of 1929. Prior to May 9, 1935, nonrecording gage at site 100 ft downstream at same datum. May 9, 1935, to June 30, 1976, nonrecording gage at present site and datum. July 1, 1976, to July 7, 1983, at site 0.47 mi upstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--75 years, 1,047 ft^3/s, 8.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,300 ft^3/s, Aug. 22, 1924, gage height, 30.77 ft, from graph based on gage readings; maximum gage height, 31.82 ft, June 24, 1974, from graph based on gage readings; minimum discharge observed, 3.8 ft^3/s, July 31, Aug. 27-29, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1883 reached a stage of about 33.0 ft, backwater from ice, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 8	1000	*3,730	*13.46				

Minimum daily discharge, 6.0 ft^3/s, Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	26	75	e100	84	e38	e110	249	83	117	22	25
2	58	20	66	e90	83	e45	e115	213	806	83	22	242
3	51	18	54	e80	78	e70	e105	186	1280	68	21	1930
4	40	19	48	67	53	416	e100	171	534	58	18	1260
5	31	20	44	60	79	304	e110	168	348	57	16	491
6	25	21	40	75	e35	569	e135	152	355	49	15	297
7	22	32	e37	101	e40	687	e170	137	257	45	13	2100
8	20	30	e34	92	e42	630	200	127	191	45	13	3670
9	18	27	e31	113	e40	523	192	172	147	40	13	3520
10	17	36	e29	138	e38	457	184	169	122	34	11	3040
11	17	36	e26	188	e36	356	188	189	108	31	11	2180
12	17	46	e24	164	e34	440	164	197	129	28	12	1380
13	16	64	e28	153	e35	607	142	162	119	26	10	970
14	15	59	e25	e110	e39	479	125	133	116	24	8.3	756
15	15	72	e22	e90	e42	336	114	114	315	22	7.9	666
16	16	92	e19	e85	e46	254	108	104	332	21	7.1	587
17	14	101	e20	e75	e44	211	101	96	196	22	7.1	494
18	14	128	e21	e70	e41	176	97	90	139	28	6.9	421
19	17	139	e22	e65	e40	154	97	88	114	28	7.2	357
20	14	139	e24	e50	e38	144	95	99	99	26	7.3	308
21	18	101	e25	e47	e37	e135	93	103	88	32	6.0	271
22	20	72	e27	e42	e36	e125	90	122	79	31	6.3	243
23	28	56	e30	e44	e35	e115	172	116	70	32	62	216
24	27	54	e32	e46	e34	e100	406	101	64	37	25	199
25	23	52	e35	e47	e33	e90	638	103	59	35	12	181
26	21	73	e38	e50	e32	106	467	99	132	38	11	158
27	20	84	e42	e52	e31	104	418	90	101	42	17	151
28	17	79	e48	e55	e33	e100	414	85	129	35	17	149
29	22	85	e58	e60	---	e105	443	109	204	29	26	136
30	82	84	e70	83	---	e110	310	100	140	26	22	126
31	69	---	e85	87	---	e115	---	89	---	24	36	---
TOTAL	859	1865	1179	2579	1238	8101	6103	4133	6856	1213	489.1	26524
MEAN	27.7	62.2	38.0	83.2	44.2	261	203	133	229	39.1	15.8	884
MAX	82	139	85	188	84	687	638	249	1280	117	62	3670
MIN	14	18	19	42	31	38	90	85	59	21	6.0	25
CFSM	.02	.04	.02	.05	.03	.16	.12	.08	.14	.02	.01	.54
IN.	.02	.04	.03	.06	.03	.18	.14	.09	.16	.03	.01	.60

CAL YR 1988 TOTAL 189332 MEAN 517 MAX 7140 MIN 12 CFSM .32 IN. 4.31
WTR YR 1989 TOTAL 61139.1 MEAN 168 MAX 3670 MIN 6.0 CFSM .10 IN. 1.39

e Estimated

05570000 SPOON RIVER AT SEVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING DEPTH (FEET) (00003)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT											
03...	1215	17002	17002	51	--	--	817	7.90	16.5	14	9.6
03...	1240	81700	17002	51	--	--	800	8.20	17.0	7.2	10.5
NOV											
17...	1215	81700	80020	94	--	--	813	--	5.5	36	11.3
17...	1250	81700	17002	94	--	--	813	--	5.5	19	11.3
JAN											
06...	1210	81700	80020	78	--	--	1100	8.20	0.0	3.7	16.8
06...	1215	81700	17002	78	--	--	1100	8.20	0.0	4.9	16.8
FEB											
23...	1325	81700	80020	35	--	--	1100	7.90	0.0	5.8	14.2
23...	1330	81700	17002	35	--	--	1100	7.90	0.0	2.0	14.2
APR											
20...	1230	17002	17002	94	--	--	820	8.10	15.0	9.8	10.1
20...	1235	81700	17002	94	--	--	816	8.60	15.0	11	10.8
MAY											
23...	1035	81700	17002	118	--	--	767	8.30	19.0	9.2	8.6
JUL											
12...	1430	81700	17002	27	--	--	565	8.30	31.0	19	10.3
12...	1432	81700	81700	--	1.00	75.0	566	8.30	31.0	--	10.1
12...	1434	81700	81700	--	1.00	60.0	565	8.34	31.0	--	10.3
12...	1436	81700	81700	--	1.00	45.0	565	8.34	31.0	--	10.3
12...	1438	81700	81700	--	1.00	30.0	564	8.34	31.0	--	10.4
12...	1440	81700	81700	--	1.00	15.0	564	8.35	31.0	--	10.4
AUG											
23...	1435	81700	80020	140	--	--	212	7.40	22.5	2000	6.4
23...	1440	81700	17002	140	--	--	212	7.40	22.5	--	6.4

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
OCT											
03...	23	K50	--	--	330	91	--	68	68	40	40
03...	25	K100	--	K300	330	89	--	69	68	40	40
NOV											
17...	--	460	--	--	380	150	--	--	83	--	43
17...	25	460	--	3200	390	160	<1.0	88	85	44	42
JAN											
06...	--	--	--	--	390	160	--	--	86	--	43
06...	14	<5	--	250	380	150	--	85	83	42	41
FEB											
23...	--	>6000	--	>6000	490	200	--	--	110	--	51
23...	11	>6000	--	>6000	470	--	--	100	110	50	--
APR											
20...	22	<20	K7	K16	370	170	--	78	76	44	44
20...	25	<20	--	--	370	170	--	78	76	44	44
MAY											
23...	28	K50	--	--	330	120	--	71	68	40	39
JUL											
12...	34	150	160	39	260	55	--	55	53	31	30
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	>6000	>6000	>5000	79	28	--	--	20	--	7.1
23...	150	>6000	>6000	>5000	92	92	--	46	23	27	8.4

05570000 SPOON RIVER AT SEVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT											
03...	55	55	3.4	3.2	--	--	--	--	244	84	--
03...	55	56	3.5	3.3	--	--	--	--	246	89	--
NOV											
17...	--	44	--	4.7	--	--	--	--	233	150	46
17...	42	41	5.5	5.1	--	--	--	--	224	200	--
JAN											
06...	--	64	--	4.5	0	290	238	234	249	170	75
06...	62	61	4.2	4.0	--	--	--	--	230	190	--
FEB											
23...	--	62	--	3.9	0	387	317	--	283	220	63
23...	60	63	4.0	4.1	--	--	--	--	282	170	--
APR											
20...	43	42	3.6	3.4	0	249	204	--	202	190	50
20...	43	42	3.3	3.2	--	--	--	--	203	190	--
MAY											
23...	38	38	3.6	3.5	--	--	--	--	211	150	--
JUL											
12...	25	24	4.6	4.7	48	109	169	--	201	50	32
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	5.6	--	5.1	--	--	--	--	51	32	8.2
23...	4.9	--	13	5.2	--	--	--	--	<10	28	--

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
OCT											
03...	--	--	--	--	37	10	<0.100	--	<0.100	<0.003	--
03...	--	--	--	--	12	3	<0.100	--	<0.100	<0.005	--
NOV											
17...	0.20	6.7	547	518	--	--	--	0.100	0.040	--	0.040
17...	--	--	--	--	54	7	0.100	--	<0.100	--	--
JAN											
06...	0.30	1.8	605	586	--	--	--	0.250	0.050	--	0.030
06...	--	--	--	--	10	5	0.370	--	<0.100	<0.001	--
FEB											
23...	0.20	1.5	686	684	--	--	--	0.520	0.030	--	0.040
23...	--	--	--	--	8	3	0.460	--	<0.100	<0.001	--
APR											
20...	0.20	1.1	543	529	51	9	<0.100	<0.100	<0.100	<0.004	0.020
20...	--	--	--	--	41	9	<0.100	--	0.130	0.013	--
MAY											
23...	--	--	--	--	85	14	<0.100	--	<0.100	<0.007	--
JUL											
12...	0.40	0.38	340	316	111	17	0.120	<0.100	<0.100	<0.015	0.020
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	0.30	4.7	141	122	--	--	--	1.20	--	--	0.220
23...	--	--	--	--	3980	380	1.30	--	0.710	0.009	--

05570000 SPOON RIVER AT SEVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)
OCT											
03...	--	--	--	0.140	0.040	540	<50	--	100	120	<0.5
03...	--	--	--	0.168	0.020	560	<50	--	100	120	<0.5
NOV											
17...	1.1	1.1	--	0.120	0.070	--	<10	1	--	110	--
17...	--	--	--	0.134	0.130	1800	320	--	100	100	<0.5
JAN											
06...	0.85	0.90	--	0.070	0.010	--	--	--	--	--	--
06...	--	--	--	0.068	0.030	210	80	--	90	88	<0.5
FEB											
23...	0.77	0.80	--	0.070	0.020	--	10	<1	--	87	--
23...	--	--	--	0.050	0.020	140	80	--	80	78	<0.5
APR											
20...	--	0.50	--	0.096	0.020	860	120	1	100	95	<0.5
20...	--	--	--	0.120	0.020	820	120	--	100	96	<0.5
MAY											
23...	--	--	--	0.140	0.060	1400	220	--	100	120	<0.5
JUL											
12...	--	0.60	0.72	0.170	0.030	1600	110	--	100	100	<0.5
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	2.1	--	0.950	0.120	--	1600	1	--	58	--
23...	--	--	--	1.80	0.120	64000	80	--	800	68	5.0

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)
OCT											
03...	<0.5	100	100	<3	<3	<5	<5	<5	<5	<5	<5
03...	<0.5	100	100	<3	<3	<5	<5	<5	<5	9	<5
NOV											
17...	<0.5	--	--	--	<1	--	<1	--	<3	--	1
17...	<0.5	90	80	<3	<3	<5	<5	<5	<5	<5	<5
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.5	140	130	<3	<3	<5	<5	<5	<5	<5	6
FEB											
23...	<0.5	--	--	--	<1	--	<1	--	<3	--	2
23...	<0.5	140	--	<3	<3	9	<5	<5	<5	<5	6
APR											
20...	<0.5	100	100	--	--	5	<5	<5	<5	<5	<5
20...	<0.5	100	100	--	--	9	<5	<5	<5	<5	<5
MAY											
23...	<0.5	130	130	<3	<3	93	<5	<5	<5	<5	<5
JUL											
12...	<0.5	70	--	<3	<3	7	<5	<5	<5	<5	<5
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	<0.5	--	--	--	<1	--	2	--	<3	--	6
23...	<0.5	110	<50	6	<3	93	<5	40	<5	88	<5

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT											
03...	830	<50	<5	<5	320	110	<0.05	--	6	<5	--
03...	890	<50	<5	<5	340	110	--	--	8	6	--
NOV											
17...	--	27	--	<5	--	120	--	0.1	--	1	<1
17...	2500	200	7	<5	250	120	--	--	<5	<5	--
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	420	<50	<5	<5	150	130	--	--	7	<5	--
FEB											
23...	--	14	--	<5	--	230	--	--	--	2	<1
23...	320	<50	<5	<5	250	240	--	--	14	7	--
APR											
20...	1400	<50	<5	<5	560	340	<0.05	<0.1	<5	<5	<1
20...	1300	<50	<5	<5	560	340	--	--	<5	<5	--
MAY											
23...	2100	<50	<5	<5	500	210	--	--	50	<5	--
JUL											
12...	2400	<50	<5	<5	630	210	--	--	9	<5	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	440	--	1	--	120	--	<0.1	--	4	<1
23...	100000	94	59	<5	3100	110	--	--	120	<10	--

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
03...	<3	<3.0	190	190	<5	<5	<50	<50	--	--	--
03...	<3	<3.0	190	190	<5	<5	<50	<50	--	--	--
NOV											
17...	--	<1.0	--	240	--	<6	--	8	68	17	98
17...	<3	<3.0	260	250	<5	<5	<50	<50	--	--	--
JAN											
06...	--	--	--	--	--	--	--	--	28	5.9	52
06...	<3	<3.0	350	350	<5	<5	<50	<50	--	--	--
FEB											
23...	--	<1.0	--	400	--	<6	--	10	94	8.9	52
23...	<3	<3.0	390	--	<5	<5	<100	<100	--	--	--
APR											
20...	<3	<3.0	290	280	<5	<5	<50	<50	93	24	85
20...	<3	<3.0	290	280	<5	<5	<50	--	--	--	--
MAY											
23...	<3	<3.0	280	270	<5	<5	<50	<50	--	--	--
JUL											
12...	<3	<3.0	210	200	7	<5	<50	<50	60	4.4	98
12...	--	--	--	--	--	--	--	--	54	0.0	100
12...	--	--	--	--	--	--	--	--	66	0.0	100
12...	--	--	--	--	--	--	--	--	64	0.0	100
12...	--	--	--	--	--	--	--	--	60	0.0	92
12...	--	--	--	--	--	--	--	--	52	0.0	99
AUG											
23...	--	<1.0	--	61	--	<6	--	20	3820	1440	100
23...	<3	<3.0	150	96	120	<5	350	<50	--	--	--

05570360 EVELYN BRANCH NEAR BRYANT, IL

LOCATION.--Lat 40°29'15", long 90°06'08", in NW1/4SW1/4 sec.19, T.6 N., R.4 E., Fulton County, Hydrologic Unit 07130005, on right bank 200 ft upstream from dam, 1.4 mi upstream from mouth and 1.5 mi northwest of Bryant.

DRAINAGE AREA.--5.78 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1971 to current year.

REVISED RECORDS.--WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder and uncontrolled drop outlet. Datum of gage is 568.64 ft above National Geodetic Vertical Datum of 1929 (Metropolitan Sanitary District of Greater Chicago bench mark).

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--17 years (water years 1973-89), 4.87 ft^3/s, 11.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 325 ft^3/s, June 5, 1986, gage height, 3.69 ft, from rating curve extended above 260 ft^3/s; minimum daily discharge, 0.01 ft^3/s, Aug. 17-22, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.2 ft^3/s, Apr. 24, gage height, 1.78 ft; minimum daily discharge, 0.01 ft^3/s, Aug. 17-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.0	1.5	e1.2	e.70	e.52	1.2	1.7	1.1	.60	.29	.97
2	1.2	.96	1.3	e1.1	e.60	e.50	1.6	1.4	.99	.54	.23	.92
3	.98	.96	1.3	e1.0	e.54	e1.0	3.0	1.3	1.1	.45	.24	.80
4	.85	.96	1.2	e.92	e.50	2.3	4.1	1.2	1.1	.32	.29	.70
5	.73	.96	1.2	e1.0	e.52	2.4	3.3	1.4	.98	.23	.24	.64
6	.67	.90	1.1	e1.2	e.54	2.1	2.7	1.1	.85	.17	.17	.75
7	.63	.90	1.1	1.6	e.58	1.8	2.1	1.0	.80	.15	.09	.79
8	.59	.84	.95	1.6	e.62	1.5	2.6	.92	1.7	.13	.06	.93
9	.59	.90	.89	1.5	e.66	1.4	2.5	1.4	2.0	.10	.04	1.2
10	.56	1.3	.84	1.4	e.70	1.4	2.3	1.4	1.8	.10	.03	1.1
11	.53	1.5	.80	1.3	e.74	1.4	1.9	1.2	1.6	.09	.03	1.0
12	.43	1.5	.82	1.2	e.80	1.3	1.6	1.0	1.7	.08	.02	.87
13	.41	1.4	.87	1.1	e.90	1.3	1.4	.94	1.7	.07	.02	.91
14	.40	1.3	.90	1.1	e.82	1.6	1.3	.87	1.5	.05	.02	.83
15	.41	1.4	.87	1.1	e.76	2.7	1.2	.82	1.4	.03	.02	.77
16	.40	1.8	.84	1.0	e.70	3.3	1.1	.78	1.2	.03	.02	.73
17	.45	1.5	.87	1.0	e.66	3.3	1.0	.72	1.1	.03	.01	.69
18	.50	1.4	.88	1.0	e.64	2.8	1.0	.72	1.0	.02	.01	.65
19	.51	1.8	.90	1.1	e.62	2.3	1.0	.87	.96	.03	.01	.61
20	.55	1.7	.91	1.1	e.60	2.0	.96	1.0	.91	.05	.01	.57
21	.71	1.6	.86	1.0	e.58	1.7	.94	.88	.86	.47	.01	.54
22	.76	1.4	1.1	.97	e.56	1.5	.96	.84	.83	.64	.01	.52
23	1.1	1.4	1.5	.97	e.54	1.4	3.1	.82	.82	.65	.72	.38
24	1.1	1.3	1.5	.97	e.52	1.3	4.4	.83	.73	.63	1.7	.24
25	1.0	1.3	1.4	1.1	e.50	1.2	3.1	1.1	.66	.59	1.7	.20
26	1.0	2.4	1.4	1.3	e.70	1.0	2.5	1.2	.66	.55	1.5	.18
27	.97	2.5	2.2	1.3	e.60	.96	3.2	1.0	.98	.51	1.3	.15
28	.92	2.1	2.3	1.4	e.56	1.6	3.2	.94	.88	.43	1.0	.13
29	.94	1.8	e1.8	1.7	---	1.9	2.6	1.1	.73	.33	.98	.13
30	.96	1.6	e1.5	e1.2	---	1.6	2.0	1.1	.64	.38	.86	.13
31	.98	---	e1.3	e.90	---	1.4	---	1.1	---	.37	.87	---
TOTAL	22.93	42.38	36.90	36.33	17.76	52.48	63.86	32.65	33.28	8.82	12.50	19.03
MEAN	.74	1.41	1.19	1.17	.63	1.69	2.13	1.05	1.11	.28	.40	.63
MAX	1.2	2.5	2.3	1.7	.90	3.3	4.4	1.7	2.0	.65	1.7	1.2
MIN	.40	.84	.80	.90	.50	.50	.94	.72	.64	.02	.01	.13
CFSM	.13	.24	.21	.20	.11	.29	.37	.18	.19	.05	.07	.11
IN.	.15	.27	.24	.23	.11	.34	.41	.21	.21	.06	.08	.12

CAL YR 1988 TOTAL 286.95 MEAN .78 MAX 24 MIN .02 CFSM .14 IN. 1.85
WTR YR 1989 TOTAL 378.92 MEAN 1.04 MAX 4.4 MIN .01 CFSM .18 IN. 2.44

e Estimated

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT									
11...	1500	81700	80020	0.74	2220	--	16.0	7.0	11
NOV									
14...	1350	81700	80020	1.2	2120	--	8.5	11.2	8.4
JAN									
03...	1415	81700	80020	0.99	2010	8.40	4.0	15.5	13
APR									
17...	1450	81700	80020	1.0	2200	8.30	13.5	10.0	7.1
MAY									
24...	1115	81700	80020	0.84	2100	8.20	20.5	8.3	6.0
JUL									
10...	1305	81700	80020	0.07	1900	7.50	30.5	10.8	6.6
AUG									
21...	1450	81700	80020	0.02	2130	7.40	25.0	8.0	6.2

DATE	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	PHOSPHOROUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)
AUG											
21...	81700	80020	27	1600	<10	660	11	10	10	120	220

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	2,4-DP, IN BOTTOM MAT. (UG/KG) (34609)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)
AUG											
21...	1000	70	14000	<1.0	<1.0	0.2	<0.1	1.0	0.1	0.2	0.4

DATE	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39531)
AUG										
21...	0.2	<0.1	<0.1	<0.1	<10	<0.1	<0.1	<0.1	<1	<0.1

DATE	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39541)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG) (39731)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG) (39741)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39758)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39761)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39787)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)
AUG										
21...	<0.1	<0.1	<0.1	<1.0	<1.0	<0.1	<1.0	<0.1	<0.1	0.02

05570370 BIG CREEK NEAR BRYANT, IL

LOCATION.--Lat 40°27'32", long 90°08'00", in center of sec.35, T.6 N., R.3 E., Fulton County, Hydrologic Unit 07130005, on left bank at upstream side of culvert on county road, 2.0 mi southwest of Bryant, 2.1 mi downstream from Evelyn Branch, 4.5 mi northeast of Lewiston, and at mile 12.5.

DRAINAGE AREA.--41.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1971 to current year.

REVISED RECORDS.--WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 504.54 ft above National Geodetic Vertical Datum of 1929 (Metropolitan Sanitary District of Greater Chicago bench mark).

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--17 years (water years 1973-89), 36.0 ft^3/s, 11.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft^3/s, June 23, 1974, gage height, 12.90 ft; maximum gage height, 13.22 ft, Apr. 2, 1983; minimum daily discharge, 0.29 ft^3/s, July 6, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 23	1400	*87	*6.67				

Minimum discharge, 0.83 ft^3/s, Aug. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	8.5	4.5	e5.3	4.4	e3.6	7.2	9.5	6.8	2.3	2.0	4.2
2	11	8.0	5.0	e4.7	4.0	e3.9	6.8	9.6	6.7	2.2	1.9	6.1
3	4.0	6.8	3.8	e4.4	e3.6	7.0	18	8.8	6.8	2.1	1.9	3.5
4	3.1	6.8	3.4	e4.0	e3.5	33	25	8.6	8.0	2.0	1.7	2.6
5	3.3	6.8	3.4	e5.0	e3.5	45	14	8.9	6.3	1.9	2.2	2.3
6	2.8	6.5	3.4	16	e3.6	24	11	8.4	5.7	1.6	1.6	2.9
7	2.7	5.7	3.4	12	e3.7	18	9.7	7.7	4.9	1.7	1.4	6.8
8	2.6	5.7	3.1	12	e3.8	14	14	7.6	5.5	1.8	1.2	5.4
9	2.5	6.5	4.8	9.0	e3.9	11	13	12	6.1	1.6	1.2	9.2
10	2.4	13	3.5	7.8	e4.0	10	11	11	6.6	1.5	1.2	5.2
11	2.5	6.3	4.8	6.8	e4.1	10	10	9.0	6.3	1.3	1.1	4.1
12	2.7	6.3	2.8	6.8	e4.2	8.8	8.6	8.2	6.1	1.4	1.1	3.4
13	2.9	8.5	3.7	6.3	e4.5	7.5	8.0	7.8	6.6	1.2	2.1	3.5
14	3.1	4.8	3.9	6.1	e5.2	6.9	7.7	7.5	5.5	1.1	2.0	4.6
15	3.6	4.2	3.9	6.0	e6.0	7.7	7.6	7.3	4.9	1.3	1.3	3.8
16	3.8	10	3.5	5.7	e5.2	7.6	7.4	7.4	4.7	1.3	1.1	3.7
17	4.2	6.0	3.6	5.3	e4.8	6.7	7.1	7.0	4.8	1.2	1.0	2.8
18	4.7	3.5	3.7	5.2	e4.5	6.6	7.2	6.3	4.5	1.4	1.0	2.5
19	5.3	6.8	4.0	6.2	e4.1	6.2	7.2	7.2	4.3	1.4	1.3	2.3
20	5.6	6.6	4.5	4.6	e4.0	5.8	6.7	10	3.9	2.4	1.3	2.3
21	5.9	3.8	5.0	8.6	e3.8	5.8	6.1	7.5	3.8	6.8	1.1	2.1
22	6.6	3.3	5.9	4.0	e3.7	5.2	6.4	6.5	3.9	5.6	1.3	2.1
23	8.2	3.1	17	4.5	e3.8	5.2	47	6.9	3.2	2.9	11	1.7
24	13	3.0	8.1	3.9	e4.0	5.2	36	5.9	2.5	2.6	8.3	1.7
25	7.6	3.2	9.3	4.5	e3.9	5.2	17	8.4	2.4	2.5	4.2	2.0
26	7.9	15	5.3	8.0	e3.8	5.0	13	10	3.0	2.5	4.5	2.3
27	10	10	14	10	e3.8	5.0	20	7.9	7.2	2.2	5.2	2.0
28	6.9	6.0	25	7.6	e3.7	15	14	7.2	4.4	2.1	3.6	2.3
29	6.2	4.9	9.8	5.1	---	12	12	8.0	3.0	2.3	3.8	2.2
30	7.6	4.5	6.9	5.5	---	7.3	10	7.6	2.5	2.0	4.5	2.3
31	8.1	---	e6.0	4.8	---	6.2	---	7.3	---	2.4	4.1	---
TOTAL	170.2	194.1	189.0	205.7	115.1	320.4	388.7	253.0	150.9	66.6	81.2	101.9
MEAN	5.49	6.47	6.10	6.64	4.11	10.3	13.0	8.16	5.03	2.15	2.62	3.40
MAX	13	15	25	16	6.0	45	47	12	8.0	6.8	11	9.2
MIN	2.4	3.0	2.8	3.9	3.5	3.6	6.1	5.9	2.4	1.1	1.0	1.7
CFSM	.13	.16	.15	.16	.10	.25	.31	.20	.12	.05	.06	.08
IN.	.15	.18	.17	.19	.10	.29	.35	.23	.14	.06	.07	.09

CAL YR 1988 TOTAL 3862.23 MEAN 10.6 MAX 353 MIN .29 CFSM .26 IN. 3.49
WTR YR 1989 TOTAL 2236.8 MEAN 6.13 MAX 47 MIN 1.0 CFSM .15 IN. 2.02

e Estimated

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
12...	1100	81700	17002	2.8	1280	7.00	7.5	7.1	10.6	18	50
12...	1105	81700	80020	2.8	1280	7.00	7.5	--	10.6	--	--
NOV											
16...	1245	81700	17002	19	1190	--	7.5	11	9.7	27	960
JAN											
04...	1320	81700	17002	4.0	1590	7.80	0.0	4.8	14.7	14	<20
FEB											
24...	1030	81700	17002	4.0	1900	8.00	0.0	3.0	12.0	17	K6
24...	1035	81700	80020	4.0	1900	8.00	0.0	--	12.0	--	--
APR											
18...	1225	81700	17002	7.0	1500	8.10	11.0	5.7	10.8	20	K40
18...	1230	81700	80020	7.0	1500	8.10	11.0	--	10.8	--	--
MAY											
24...	1405	81700	17002	5.7	1430	7.90	21.0	2.1	7.8	20	K240
JUL											
11...	1220	81700	17002	1.5	1360	8.10	30.0	5.3	7.4	21	310
AUG											
22...	1420	81700	17002	1.1	1150	7.80	25.5	13	10.4	30	K200

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT											
12...	580	--	<1.0	130	--	62	--	77	--	8.5	8.6
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	490	330	<1.0	100	100	59	57	74	71	9.6	8.9
JAN											
04...	680	440	--	140	140	79	78	120	110	8.4	8.4
FEB											
24...	770	--	--	160	--	91	--	140	140	10	10
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	730	470	--	160	160	81	79	85	83	6.7	6.4
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	700	440	--	160	150	78	77	81	80	6.4	6.3
JUL											
11...	600	380	--	140	140	62	62	86	86	11	10
AUG											
22...	490	320	--	110	110	48	48	77	78	13	12

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT											
12...	440	470	8	3	1.80	<0.100	--	1.30	1.20	320	90
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	160	410	34	6	3.70	0.100	--	2.40	2.30	1700	220
JAN											
04...	235	640	6	3	6.00	0.140	<0.001	1.60	1.40	200	140
FEB											
24...	242	680	6	2	6.00	0.250	0.002	1.70	1.50	130	100
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	262	600	18	4	1.50	0.350	0.009	0.820	0.590	510	240
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	268	540	41	7	1.70	0.450	0.016	8.70	--	710	90
JUL											
11...	218	31	26	5	2.30	0.200	0.019	0.830	0.740	580	130
AUG											
22...	169	380	117	21	2.90	<0.100	<0.004	1.30	1.00	1200	240

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT											
12...	30	26	<0.5	<0.5	460	--	<3	<3	150	70	6
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	40	19	<0.5	<0.5	540	510	<3	<3	7	6	<5
JAN											
04...	30	25	<0.5	<0.5	580	580	<3	3	<5	<5	8
FEB											
24...	20	17	<0.5	<0.5	600	--	<3	<3	7	7	<5
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	30	25	<0.5	<0.5	530	510	--	--	9	9	<5
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	60	45	<0.5	<0.5	540	540	<3	<3	<5	<5	<5
JUL											
11...	50	41	<0.5	<0.5	550	540	<3	<3	12	7	<5
AUG											
22...	40	34	<0.5	<0.5	510	500	<3	--	<5	<5	<5

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT										
12...	<5	<5	<5	440	<50	<5	<5	230	220	11
12...	--	--	--	--	--	--	--	--	--	--
NOV										
16...	<5	<5	<5	3300	57	<5	<5	270	160	6
JAN										
04...	7	5	6	430	<50	<5	<5	350	320	14
FEB										
24...	<5	<5	<5	430	<50	<5	<5	480	470	13
24...	--	--	--	--	--	--	--	--	--	--
APR										
18...	<5	<5	<5	920	<50	<5	<5	1100	1000	10
18...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	<5	<5	<5	1300	<50	<5	<5	1200	1100	<5
JUL										
11...	<5	<5	<5	1000	<50	<5	<5	510	470	14
AUG										
22...	<5	<5	<5	2500	290	<5	<5	510	360	<10

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
12...	--	<3	<3.0	600	--	6	7	<50	<50	--
12...	--	--	--	--	--	--	--	--	--	6.5
NOV										
16...	6	<3	<3.0	450	430	<5	<5	<50	<50	4.2
JAN										
04...	14	5	<5.0	620	610	7	6	<50	<50	6.6
FEB										
24...	12	<3	<3.0	630	--	<5	<5	<50	<50	8.2
24...	--	--	--	--	--	--	--	--	--	7.4
APR										
18...	9	<3	<3.0	610	600	<5	<5	<50	<50	--
18...	--	--	--	--	--	--	--	--	--	7.0
MAY										
24...	<5	<3	<3.0	610	600	<5	<5	<50	<50	7.0
JUL										
11...	11	<3	<3.0	550	550	8	6	<50	<50	7.7
AUG										
22...	<10	<3	<3.0	480	480	8	<5	<50	<50	12

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	PHOSPHOROUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)
AUG											
22...	81700	80020	16	1900	<10	890	12	<10	10	120	400

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	2,4-DP, IN BOTTOM MAT. (UG/KG) (34609)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39251)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)
AUG											
22...	860	100	17000	<1.0	<1.0	<0.1	0.4	11	1.6	0.7	0.3

DATE	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39531)
AUG										
22...	3.0	<0.1	<0.1	<0.1	<10	<0.1	0.2	<4.0	8	<0.1

DATE	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39541)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG) (39731)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG) (39741)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39758)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39761)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39787)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)
AUG										
22...	<0.1	0.7	<0.1	<1.0	<1.0	<0.1	<1.0	<0.1	<0.1	0.05

05570380 SLUG RUN NEAR BRYANT, IL

LOCATION.--Lat 40°28'24", long 90°08'37", in SE1/4NE1/4 sec.27, T.6 N., R.3 E., Fulton County, Hydrologic Unit 07130005, on left bank at upstream side of concrete curb on private road, 1.3 mi upstream from mouth and 2.5 mi northwest of Bryant.

DRAINAGE AREA.--7.12 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1975 to current year.

REVISED RECORDS.--WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.25 ft above National Geodetic Vertical Datum of 1929 (Metropolitan Sanitary District of Greater Chicago (MSDGC) bench mark).

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. There is a dam 1.6 mi upstream from the gage that retains an indeterminate amount of water and is maintained by MSDGC.

AVERAGE DISCHARGE.--14 years (water years 1976-89), 4.54 ft³/s, 8.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 685 ft³/s, June 5, 1986, gage height, 8.91 ft, from floodmark, from rating curve extended above 285 ft³/s; no flow for many days in 1988-89.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s, May 22, gage height, 5.26 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	.51	.23	e.45	.35	e.90	.50	1.3	1.3	.16	.41	1.0
2	.27	.38	.23	e.35	.31	e.95	1.5	1.1	1.3	.16	.31	.75
3	.20	.16	.23	e.32	.40	e1.0	5.1	1.1	1.9	.14	.33	.63
4	.14	.26	.23	e.28	e.35	e5.0	3.1	1.1	1.9	.17	.39	.60
5	.10	.37	.23	e.30	e.33	e4.5	1.9	1.2	2.0	.33	.20	.53
6	.10	.37	.23	e.34	e.37	e3.0	1.1	1.3	1.9	.24	.09	.75
7	.10	.28	.23	e.49	e.39	e2.5	.85	1.1	1.5	.16	.00	.71
8	.10	.23	.20	1.5	e.40	e2.0	3.1	1.1	.84	.14	.00	1.2
9	.13	.35	.19	4.1	e.37	e1.6	2.1	1.5	.76	.04	.00	1.3
10	.15	.64	.16	1.4	e.35	e1.3	2.3	1.1	.76	.00	.00	1.1
11	.16	.37	.42	1.2	e.36	e1.0	.83	1.0	.86	.00	.00	.87
12	.17	.52	.37	.55	e.38	e.85	.52	.62	1.3	.00	.00	.68
13	.18	.43	.57	.96	e2.0	e1.5	.50	.50	.80	.00	.00	.91
14	.22	.33	.38	.74	e2.2	e1.4	.55	.50	.50	.00	.00	.88
15	.15	.42	.42	.59	e2.5	e1.2	.56	.50	.50	.00	.00	.76
16	.22	.65	2.4	.45	e1.8	e1.1	.54	.50	.50	.00	.00	.72
17	.26	.36	.51	.31	e1.0	e.95	.47	.50	.47	.00	.00	.59
18	.37	.29	.54	.29	e.90	e1.5	.46	.50	.45	.00	.00	.61
19	.31	.43	.69	.30	e.72	e1.8	.46	.77	.37	.04	.00	.63
20	.31	.31	.52	.30	e.72	e1.6	.44	.70	.28	.31	.00	.63
21	.47	.26	.30	.37	e.70	e1.5	2.0	.71	.26	.90	.00	.63
22	.50	.23	.71	.33	e.65	e1.9	.52	3.9	.26	.65	.00	.64
23	.61	.23	.43	.30	e.60	e2.2	6.4	.69	.31	.57	2.4	.71
24	.40	.23	.38	.23	e.60	e2.4	3.6	.51	.21	.50	.83	.62
25	.44	.23	e1.5	.36	e.70	e2.3	2.3	1.0	.13	.60	.74	.50
26	.50	.58	e1.2	.43	e.72	e2.2	1.7	.83	.46	.63	.63	.50
27	.47	.35	e1.0	.40	e.76	1.3	2.2	.73	.53	.58	.58	.50
28	.50	.31	e4.0	.33	e.80	2.5	2.3	.82	.28	.50	.50	.48
29	.54	.29	e2.0	.40	---	1.2	2.0	1.3	.20	.52	.67	.40
30	.63	.23	e.90	.40	---	.75	1.7	2.2	.16	.60	.58	.40
31	.58	---	e.50	.40	---	.58	---	1.6	---	.47	.85	---
TOTAL	9.71	10.60	21.90	19.17	21.73	54.48	51.60	32.28	22.99	8.41	9.51	21.23
MEAN	.31	.35	.71	.62	.78	1.76	1.72	1.04	.77	.27	.31	.71
MAX	.63	.65	4.0	4.1	2.5	5.0	6.4	3.9	2.0	.90	2.4	1.3
MIN	.10	.16	.16	.23	.31	.58	.44	.50	.13	.00	.00	.40
CFSM	.04	.05	.10	.09	.11	.25	.24	.15	.11	.04	.04	.10
IN.	.05	.06	.11	.10	.11	.28	.27	.17	.12	.04	.05	.11

CAL YR 1988 TOTAL 290.23 MEAN .79 MAX 14 MIN .00 CFSM .11 IN. 1.52
WTR YR 1989 TOTAL 283.61 MEAN .78 MAX 6.4 MIN .00 CFSM .11 IN. 1.48

e Estimated

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
12...	0900	81700	17002	0.17	2050	6.90	5.5	7.5	7.5	10	700
12...	0905	81700	80020	0.17	2050	6.90	5.5	--	7.5	--	--
NOV											
16...	1135	81700	17002	0.65	1900	--	6.5	6.9	10.2	10	K50
JAN											
04...	1100	81700	17002	0.28	2300	7.70	0.5	1.7	12.2	6	K25
FEB											
24...	0920	81700	17002	0.60	2800	8.10	0.0	1.0	12.6	8	K2
24...	0925	81700	80020	0.60	2800	8.00	0.0	--	12.6	--	--
APR											
18...	1120	81700	17002	0.46	2050	8.20	8.5	3.6	12.8	15	54
18...	1130	81700	80020	0.46	2050	8.20	8.5	--	12.8	--	--
MAY											
24...	1250	81700	17002	0.51	2040	8.10	22.5	2.2	9.8	12	110
JUL											
11...	1135	81700	17002	0.0	1830	7.80	22.5	2.0	6.0	14	230

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
OCT											
12...	1100	810	--	190	190	160	160	72	73	7.3	7.3
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	1200	--	<1.0	230	--	160	--	62	63	8.1	8.1
JAN											
04...	1500	1100	--	270	270	190	190	78	76	6.8	6.7
FEB											
24...	1700	--	--	320	--	230	--	88	88	7.8	7.9
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	1300	1000	--	250	250	160	160	61	60	4.1	4.7
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	1400	1100	--	250	250	180	180	67	66	4.3	4.4
JUL											
11...	1100	810	--	230	220	140	140	57	56	5.8	5.8

Data for the remaining months were unavailable at time of publication.
These data may be obtained by contacting the district office.

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT											
12...	329	980	6	3	<0.100	<0.100	<0.001	0.400	0.300	<50	--
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	282	1000	8	1	<0.100	<0.100	--	0.070	0.060	570	460
JAN											
04...	311	1400	4	1	0.280	<0.100	<0.001	0.020	0.010	240	230
FEB											
24...	300	1500	9	1	<0.100	<0.100	<0.001	0.020	0.020	160	100
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	260	1100	35	7	<0.100	<0.100	<0.003	0.040	0.010	650	330
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	273	1100	12	4	0.210	0.200	0.012	0.540	0.040	<50	<50
JUL											
11...	306	900	34	4	0.200	0.300	0.009	0.100	0.050	710	180

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT											
12...	30	34	<0.5	<0.5	570	570	<3	<3	<5	--	<5
12...	--	--	--	--	--	--	--	--	--	--	--
NOV											
16...	30	31	<0.5	<0.5	560	550	<3	<3	12	10	<5
JAN											
04...	30	29	<0.5	<0.5	540	--	<3	4	19	--	5
FEB											
24...	20	21	<0.5	<0.5	570	--	<3	<3	8	9	<5
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	20	17	<0.5	<0.5	420	410	--	--	15	10	<5
18...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	40	38	<0.5	<0.5	540	530	<3	<3	<10	<10	<5
JUL											
11...	50	43	<0.5	<0.5	460	440	<3	<3	13	10	<5

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT										
12...	<5	<5	<5	160	79	<5	<5	120	110	7
12...	--	--	--	--	--	--	--	--	--	--
NOV										
16...	<5	<5	<5	300	<50	<5	<5	170	140	6
JAN										
04...	--	<5	<5	110	<50	<5	<5	300	290	8
FEB										
24...	<5	<5	7	140	<50	<5	<5	600	490	14
24...	--	--	--	--	--	--	--	--	--	--
APR										
18...	<5	<5	<5	780	<50	<5	<5	1400	1100	11
18...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	<5	<5	<5	180	<50	<5	<5	870	760	<5
JUL										
11...	<5	<5	<5	980	<50	<5	<5	3300	2700	13

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
12...	9	<3	<3.0	880	880	<5	<5	<50	<50	--
12...	--	--	--	--	--	--	--	--	--	3.0
NOV										
16...	<5	<3	<3.0	890	--	<5	<5	<50	<50	9.4
JAN										
04...	--	<3	--	1000	1000	<5	6	<50	<50	3.9
FEB										
24...	13	<3	<3.0	1100	--	<5	<5	<50	<50	5.3
24...	--	--	--	--	--	--	--	--	--	4.1
APR										
18...	--	<3	<3.0	860	850	<5	<5	<50	<50	--
18...	--	--	--	--	--	--	--	--	--	3.8
MAY										
24...	<5	<3	<3.0	900	880	<5	<5	<50	<50	4.2
JUL										
11...	10	<3	<3.0	770	750	5	<5	<50	<50	5.8

05570500 ILLINOIS RIVER AT HAVANA, IL

LOCATION.--Lat 40°17'34", long 90°04'07", in NE1/4SW1/4 sec.1, T.21 N., R.9 W., Mason County, Hydrologic Unit 07130003, on left bank 100 ft downstream from U.S. Highway 136 bridge, 0.8 mi downstream from mouth of Spoon River, and at mile 119.6.

DRAINAGE AREA.--18,299 mi^2.

PERIOD OF RECORD.--October 1921 to September 1927, June 1985 to September 1989 (discontinued). Gage-height records collected at same site October 1878 to May 1881, January 1896 to December 1904 are contained in House Document 263, 59th Congress, 1st Session, Des Plaines and Illinois Rivers. January 1907 to March 1917, from Flood-Control Report, Illinois Division of Waterways, 1929; April 1917 to September 1921, October 1928 to September 1961, from report of the National Weather Service; October 1961 to September 1967, in files of U.S. Army Corps of Engineers. Oct. 17, 1984, to June 17, 1985, available in files of Illinois district office.

GAGE.--Water-stage recorder and point-velocity meter. Datum of gage is 424.40 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to 1967, nonrecording gage at same site at datum 0.13 ft lower.

REMARKS.--Records poor. Occasional regulation at low flow by navigation dams at Peoria and La Grange. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers gage-height and velocity satellite telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1922-27, 1986-89), 19,464 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,600 ft^3/s, Oct. 12, 1926, gage height, 23.4 ft; minimum daily discharge, 4,100 ft^3/s, Sept. 10, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 90,300 ft^3/s, Mar. 9, 1985 (by discharge measurement), gage height, 26.30 ft; maximum gage height, 27.3 ft, May 25, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,000 ft^3/s, Sept. 17; maximum gage height, 15.01 ft Apr. 12; minimum daily discharge, 5,000 ft^3/s, Oct. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6500	e6200	e9000	e12000	e8400	e7400	e12000	e10900	e18000	e7800	e9500	e7800
2	e6000	e6200	e9000	e11800	e8600	e7400	e12100	e10800	e20500	e7800	e9200	e8400
3	e6000	e6300	e9500	e11000	e9200	e7200	e12300	e10600	e22000	e7900	e9100	e13500
4	e5800	e6500	e9000	e12000	e9600	e7400	e12500	e10400	e23100	e8200	e9100	e16500
5	e5400	e6000	e7000	e11000	e9100	e8100	e13700	e10200	e24100	e8400	e9000	e18000
6	e5400	e8000	e8000	e11500	e7200	e9500	e14500	e9600	e24500	e8400	e8600	e18000
7	e5100	e7000	e8000	e12000	e5600	e10800	e17000	e8800	e26000	e8100	e8800	e17800
8	e6000	e8500	e7000	e11000	e5600	e11800	e18900	e8700	e25500	e7200	e9000	e20000
9	e6000	e7000	e8000	e11000	e6200	e12500	e20000	e8200	e25000	e6800	e9200	e25000
10	e5800	e7000	e7400	e11200	e7000	e13000	e20000	e8200	e24500	e6200	e9400	e26000
11	e5100	e9000	e6000	e12000	e5800	e13500	e19500	e8100	e24000	e6000	e9400	e26800
12	e5400	e10000	e8000	e13000	e6100	e13900	e18000	e8100	e23000	e6000	e9300	e27800
13	e5000	e10000	e8000	e15000	e6600	e14100	e15500	e7800	e22000	e6200	e9000	e28000
14	e6600	e10000	e7200	e20000	e6500	e14200	e13400	e7400	e21000	e6000	e8600	e30000
15	e7000	e11200	e7000	e21000	e7600	e14000	e12500	e7200	e19500	e6100	e8100	e31000
16	e7200	e13000	e6400	e17000	e8000	e14000	e12000	e7000	e17500	e5800	e7800	e32000
17	e7400	e14000	e7400	e17000	e6600	e14000	e11800	e7200	e15500	e5600	e7000	e33000
18	e7000	e15000	e7000	e14000	e6800	e14100	e11600	e7600	e14000	e5600	e6200	e33000
19	e6400	e15000	e6400	e12000	e6000	e14200	e11200	e7700	e12000	e5800	e5800	e32000
20	e7500	e15000	e8000	e7000	e5800	e14200	e11000	e7500	e11000	e6000	e5600	e32000
21	e7500	e15500	e7000	e7400	e6000	e14100	e11000	e7700	e10000	e7400	e5700	e31000
22	e6800	e17000	e7400	e7800	e6000	e14000	e10800	e7800	e9800	e9200	e5900	e30000
23	e7500	e12000	e7600	e7600	e7000	e14100	e10800	e8000	e9500	e10500	e6000	e28000
24	e6400	e11500	e7500	e7000	e7800	e13000	e10800	e8800	e9300	e11800	e6000	e27000
25	e7400	e12000	e8600	e6000	e7800	e12500	e11000	e9500	e9000	e12200	e6300	e26000
26	e7000	e13000	e8800	e7400	e7800	e13000	e11000	e10000	e8600	e12000	e6600	e26000
27	e6300	e8600	e9000	e6800	e7800	e13200	e11000	e10600	e8300	e11000	e7300	e25000
28	e6200	e8000	e10000	e7400	e7800	e13000	e11000	e11800	e8000	e10900	e7700	e23000
29	e6200	e8000	e11000	e7200	---	e12900	e11000	e13200	e7800	e10500	e8000	e18000
30	e6300	e9000	e10000	e6800	---	e12700	e11000	e14000	e7600	e10000	e7600	e16000
31	e5800	---	e11000	e6600	---	e12500	---	e15000	---	e9800	e7600	---
TOTAL	196000	305500	251200	340500	200300	380300	398900	288400	500600	251200	242400	726600
MEAN	6323	10180	8103	10980	7154	12270	13300	9303	16690	8103	7819	24220
MAX	7500	17000	11000	21000	9600	14200	20000	15000	26000	12200	9500	33000
MIN	5000	6000	6000	6000	5600	7200	10800	7000	7600	5600	5600	7800

CAL YR 1988	TOTAL 4786600	MEAN 13080	MAX 40000	MIN 4100
WTR YR 1989	TOTAL 4081900	MEAN 11180	MAX 33000	MIN 5000

e Estimated

05570520 ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL

LOCATION.--Lat 40°16'49", long 90°04'53", in NW1/4SE1/4 sec.11, T.21 N., R.9 E., Mason County, Hydrologic Unit 07130003, at the Illinois Power Company water intake, 1.3 mi south of Havana, 1.9 mi downstream from Spoon River, and at mile 118.6.

DRAINAGE AREA.--18,300 mi^2, approximately.

PERIOD OF RECORD.--Water years 1978 to current year.

REVISED RECORDS.--WDR IL-81-2: 1980.

REMARKS.--Discharges are from Illinois River at Havana (station 05570500).

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV 07...	1030	17002	17002	7000	692	7.70	8.0	--	10.8	28	600
DEC 20...	1030	17002	17002	8000	835	8.10	3.0	46	14.7	23	K550
JAN 25...	1030	17002	17002	6000	823	8.20	4.0	20	13.9	28	K140
MAR 01...	1100	17002	17002	7400	997	8.20	2.0	7.9	14.7	20	480
APR 04...	1100	17002	17002	12500	880	7.90	10.0	12	10.6	25	960
MAY 22...	1100	17002	17002	7800	856	8.10	21.0	3.8	5.3	24	3400
JUN 22...	1030	17002	17002	9800	753	8.00	27.0	8.1	7.1	29	K300
JUL 31...	1100	17002	17002	9800	645	8.00	27.5	18	6.1	20	K120
SEP 11...	1030	17002	17002	26800	498	7.40	21.0	39	6.9	22	K300

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
NOV 07...	240	240	57	56	24	24	54	54	4.7	4.4	49
DEC 20...	350	350	88	87	33	32	47	48	4.9	4.7	--
JAN 25...	310	310	76	75	29	29	48	49	3.4	3.4	46
MAR 01...	350	350	90	87	34	33	79	79	4.8	4.6	85
APR 04...	330	330	80	79	32	31	57	57	3.7	3.5	52
MAY 22...	300	300	73	72	29	29	57	57	3.5	3.1	63
JUN 22...	320	320	81	77	31	30	39	38	4.1	3.1	69
JUL 31...	250	250	59	57	26	25	38	38	4.5	4.3	82
SEP 11...	180	180	48	44	20	18	20	19	4.3	4.7	96

05570520 ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)
NOV 07...	6	3.00	<0.100	<0.001	0.360	0.230	1100	<50	40	33
DEC 20...	--	4.30	0.140	0.002	0.290	0.190	1400	<50	60	43
JAN 25...	7	6.50	0.420	0.008	0.280	0.170	1000	80	50	43
MAR 01...	11	5.50	0.620	0.010	0.430	0.270	1200	80	60	44
APR 04...	8	5.00	0.480	0.007	0.272	0.160	1000	190	50	46
MAY 22...	9	3.40	0.590	0.032	0.290	0.210	1200	190	60	50
JUN 22...	11	4.50	0.180	0.011	0.370	0.160	2100	190	80	55
JUL 31...	12	3.40	0.770	0.052	0.300	0.120	1300	70	60	47
SEP 11...	12	3.40	0.100	0.001	0.400	0.200	2700	<50	60	39

DATE	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)
NOV 07...	<0.5	<0.5	170	170	<3	<3	<5	<5	<5	<5
DEC 20...	<0.5	<0.5	140	140	<3	<3	6	<5	<5	<5
JAN 25...	<0.5	<0.5	110	--	<3	<3	9	6	6	<5
MAR 01...	<0.5	<0.5	160	150	<3	<3	10	<5	<5	<5
APR 04...	<0.5	<0.5	110	110	<3	<3	<5	<5	<5	<5
MAY 22...	<0.5	<0.5	160	160	<3	<3	<5	<5	<5	<5
JUN 22...	<1.0	<1	130	120	<3	<3	<5	<5	<5	<5
JUL 31...	<0.5	<0.5	130	130	<3	<3	<5	<5	<5	<5
SEP 11...	<0.5	<0.5	110	100	<3	<3	11	<5	5	<5

05570520 ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
NOV										
07...	<5	<5	1500	<50	<5	<5	76	5	<0.05	8
DEC										
20...	6	<5	2300	<50	<5	<5	83	<5	<0.05	18
JAN										
25...	7	--	1600	<50	<5	<5	60	11	<0.05	14
MAR										
01...	7	<5	2200	<50	<5	<5	120	39	<0.05	18
APR										
04...	<5	<5	1300	<50	<5	<5	65	<5	<0.05	<5
MAY										
22...	<5	<5	1600	<50	7	<5	92	13	<0.05	<5
JUN										
22...	<5	<5	3000	<50	7	<5	170	7	<0.05	7
JUL										
31...	<5	<5	1900	<50	<5	<5	120	6	<0.05	<5
SEP										
11...	9	<5	4100	<50	7	<5	130	<5	<0.05	13

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV										
07...	<5	<3	<3.0	240	240	7	6	<50	<50	8.1
DEC										
20...	12	<3	<3.0	320	310	<5	<5	<100	<100	9.7
JAN										
25...	10	<5	<5.0	240	240	6	<5	<50	<50	7.4
MAR										
01...	11	<3	<3.0	330	320	<5	<5	<100	<100	7.4
APR										
04...	6	<3	<3.0	310	310	<5	<5	<50	<50	6.9
MAY										
22...	<5	<3	<3.0	280	280	<5	<5	<50	<50	8.2
JUN										
22...	<5	<3	<3.0	240	230	<5	<5	<50	<50	10
JUL										
31...	<5	<3	<3.0	220	210	<5	<5	<50	<50	8.1
SEP										
11...	8	<3	<3.0	170	160	9	<5	<100	<100	8.1

ILLINOIS RIVER BASIN

05570910 SANGAMON RIVER AT FISHER, IL

LOCATION.--Lat 40°18'40", long 88°19'20", in NE1/4NW1/4 sec.5, T.21 N., R.8 E., Champaign County, Hydrologic Unit 07130006, on left downstream side of bridge on U.S. Highway 136, 1.2 mi east of Fisher, 8.8 mi west of Rantoul, and at mile 201.1.

DRAINAGE AREA.--240 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 683.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years, 207 ft^3/s, 11.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,550 ft^3/s, Nov. 20, 1985, gage height, 18.30 ft; no flow Aug. 31 to Sept. 4, Sept. 13-21, Oct. 10-16, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	1700	*3,710	*14.74	No other peak greater than base discharge.			

No flow Oct. 10-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.30	e7.0	123	96	e32	119	141	304	e19	29	101
2	.01	.41	e5.0	101	84	e40	139	133	267	e16	25	312
3	.03	.38	e4.0	90	72	69	722	122	246	e19	16	184
4	.05	.92	e3.0	82	51	219	944	113	235	e16	12	128
5	.15	1.4	e2.5	72	e37	602	721	133	213	e14	5.8	104
6	.15	5.8	e2.2	103	e31	389	461	120	196	e12	5.0	86
7	.09	3.9	e2.0	130	e29	273	363	98	183	e10	5.3	79
8	.05	1.5	e1.8	353	e26	265	345	89	172	e9.0	e6.4	94
9	.04	1.0	e1.6	303	e28	209	438	103	164	e7.8	e7.2	311
10	.00	11	e1.5	284	e31	186	359	115	152	e6.6	e6.2	690
11	.00	51	e1.4	e170	e35	208	285	104	140	e5.6	e5.6	372
12	.00	8.5	e1.3	e120	e38	208	249	98	139	e5.0	e5.0	180
13	.00	4.7	e1.2	e100	e41	197	212	100	141	e4.2	e4.8	131
14	.00	6.9	e1.2	e94	e44	193	192	92	127	e3.9	e4.6	140
15	.00	3.0	e1.1	e88	e47	187	183	82	118	e3.5	e4.5	266
16	.00	17	e1.0	e80	e43	146	165	78	112	e3.4	e4.4	228
17	1.8	76	e1.0	e76	e40	139	155	72	107	e3.3	e4.2	158
18	2.3	25	1.1	e72	e37	338	141	69	100	e8.8	e4.1	123
19	5.5	5.4	1.5	e70	e35	259	136	104	98	e35	e4.1	101
20	1.7	12	3.0	e70	e38	205	126	618	91	99	e4.0	85
21	.56	142	8.0	e69	e41	212	122	569	80	142	e5.4	74
22	.30	98	12	e68	e43	179	117	332	74	177	e7.0	68
23	.24	61	306	e69	e35	162	113	277	66	149	e9.0	62
24	.28	42	380	e70	e30	151	106	249	56	119	e7.4	56
25	1.3	31	213	e74	e37	143	103	337	49	97	e6.0	50
26	1.0	24	146	e80	e40	129	100	2880	43	67	e7.4	49
27	.50	25	129	e86	e37	119	107	2990	46	60	e9.5	46
28	.30	21	189	100	e35	118	168	1770	44	51	e12	40
29	.23	12	206	97	---	117	221	944	30	39	e16	38
30	.18	e10	204	97	---	116	168	525	e23	32	e12	37
31	.21	---	160	95	---	138	---	380	---	27	e40	---
TOTAL	17.01	702.11	1999.4	3486	1181	5948	7780	13837	3816	1261.1	294.9	4393
MEAN	.55	23.4	64.5	112	42.2	192	259	446	127	40.7	9.51	146
MAX	5.5	142	380	353	96	602	944	2990	304	177	40	690
MIN	.00	.30	1.0	68	26	32	100	69	23	3.3	4.0	37
CFSM	.00	.10	.27	.47	.18	.80	1.08	1.86	.53	.17	.04	.61
IN.	.00	.11	.31	.54	.18	.92	1.21	2.14	.59	.20	.05	.68

CAL YR 1988 TOTAL 27143.49 MEAN 74.2 MAX 1000 MIN .00 CFSM .31 IN. 4.21
WTR YR 1989 TOTAL 44715.52 MEAN 123 MAX 2990 MIN .00 CFSM .51 IN. 6.93

e Estimated

05570910 SANGAMON RIVER AT FISHER, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV											
09...	1000	17002	17002	0.80	821	7.30	7.0	--	6.3	24	10
DEC											
13...	1400	17002	17002	1.2	1050	7.90	1.0	3.5	13.7	6	<10
JAN											
18...	1430	17002	17002	72	730	8.40	4.0	1.2	13.9	4	10
FEB											
22...	1430	17002	17002	43	720	8.50	0.0	0.20	16.7	6	40
APR											
12...	0830	17002	17002	252	686	8.10	8.0	5.6	11.7	7	<10
MAY											
10...	1200	17002	17002	115	680	--	--	5.5	--	10	520
JUN											
19...	1100	17002	17002	94	765	7.70	20.5	0.50	7.3	8	430
AUG											
01...	1400	17002	17002	28	725	8.50	24.5	11	8.6	17	150
SEP											
13...	1400	17002	17002	114	717	7.80	17.5	6.1	8.1	9	1200

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
NOV											
09...	280	280	62	62	32	31	61	61	8.2	8.0	4
DEC											
13...	500	500	110	110	54	53	49	47	5.0	4.8	4
JAN											
18...	350	350	83	82	35	35	12	12	1	0.91	8
FEB											
22...	360	370	86	85	38	37	17	16	1.2	1.2	1
APR											
12...	350	350	82	81	36	36	7.4	7.5	1	0.90	31
MAY											
10...	350	350	82	81	37	36	9.4	9.4	1.3	0.85	24
JUN											
19...	390	390	97	93	41	39	9.8	9.5	0.3	0.30	15
AUG											
01...	360	360	81	78	42	41	21	20	1.1	1.9	35
SEP											
13...	370	370	92	90	37	36	8.5	8.4	1.3	0.83	93

05570910 SANGAMON RIVER AT FISHER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV 09...	2	<0.100	<0.100	<0.001	0.70	--	0.150	0.120	230	<50
DEC 13...	2	3.80	<0.100	<0.001	0.40	4.2	0.240	0.220	90	<50
JAN 18...	2	13.0	<0.100	<0.003	0.30	13	0.050	0.040	200	70
FEB 22...	1	9.40	<0.100	<0.003	0.30	9.7	0.060	0.050	70	50
APR 12...	4	19.0	<0.100	<0.002	0.50	19	0.040	0.010	980	330
MAY 10...	3	13.0	<0.100	--	<0.10	--	0.060	0.030	550	70
JUN 19...	6	14.0	<0.100	<0.002	0.70	15	0.080	0.040	2000	1100
AUG 01...	9	1.20	<0.100	<0.016	1.0	2.2	0.120	0.040	690	<50
SEP 13...	11	8.30	<0.100	<0.002	0.60	8.9	0.120	0.080	1400	60

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
NOV 09...	60	62	<0.5	<0.5	130	130	<3	<3	<5	<5
DEC 13...	70	70	<0.5	<0.5	120	120	<3	<3	<5	<5
JAN 18...	50	52	<0.5	<0.5	<50	<50	<3	<3	5	<5
FEB 22...	40	40	<0.5	<0.5	<50	<50	<3	<3	<5	<5
APR 12...	50	49	<0.5	<0.5	<50	<50	<3	<3	<5	<5
MAY 10...	50	44	<0.5	<0.5	<50	<50	--	--	6	6
JUN 19...	80	67	<0.5	<0.5	<50	<50	<3	<3	<5	<5
AUG 01...	80	74	<0.5	<0.5	80	80	<3	<3	<5	<5
SEP 13...	90	73	<0.5	<0.5	70	60	<3	<3	<5	<5

05570910 SANGAMON RIVER AT FISHER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV										
09...	<5	<5	<5	<5	590	290	<5	<5	260	250
DEC										
13...	<5	<5	<5	<5	120	<50	<5	<5	35	30
JAN										
18...	<5	<5	<5	<5	230	<50	<5	<5	23	13
FEB										
22...	<5	<5	<5	<5	120	<50	<5	<5	22	20
APR										
12...	<5	<5	<5	<5	910	89	<5	<5	44	13
MAY										
10...	<5	<5	<5	<5	670	<50	<5	<5	46	18
JUN										
19...	<5	<5	<5	<5	1300	<50	<5	<5	38	<5
AUG										
01...	<5	<5	<5	<5	830	<50	<5	<5	150	64
SEP										
13...	<5	<5	<5	<5	1800	<50	<5	<5	88	11

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV										
09...	<5	<5	<3	<3.0	280	270	<5	<5	<50	<50
DEC										
13...	<5	6	<3	<3.0	370	360	<5	<5	<50	<50
JAN										
18...	<5	<5	<3	<3.0	180	180	<5	<5	<50	<50
FEB										
22...	<5	<5	<3	<3.0	190	190	<5	<5	<50	<50
APR										
12...	<5	<5	<3	<3.0	150	150	<5	<5	<50	<50
MAY										
10...	<5	6	<3	<3.0	160	160	<5	<5	<50	<50
JUN										
19...	<5	<5	<3	<3.0	180	170	<5	<5	<50	<50
AUG										
01...	<5	<5	<3	<3.0	220	210	<5	<5	<50	<50
SEP										
13...	<5	<5	<3	<3.0	170	170	<5	<5	<100	<100

05572000 SANGAMON RIVER AT MONTICELLO, IL

LOCATION.--Lat 40°01'51", long 88°35'20", in NE1/4SW1/4 sec.12, T.18 N., R.5 E., Piatt County, Hydrologic Unit 07130006, near center of span on downstream side of highway bridge, 0.5 mi west of Monticello and at mile 162.2.

DRAINAGE AREA.--550 mi^2.

PERIOD OF RECORD.--February 1908 to December 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1308. Published as "near Monticello" 1910-12.

REVISED RECORDS.--WSP 525: 1920. WSP 1115: 1946-47. WSP 1208: 1915-16, 1918-20, 1927, 1929, 1939. WSP 1508: 1908(M), 1917, 1928(M). WDR IL-81-2: 1909(P), 1912(P), 1915(P), 1919-32(P), 1935(P), 1937-38(P), 1940-41(P), 1944(P), 1946-47(P).

GAGE.--Water-stage recorder. Datum of gage is 625.89 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1964, nonrecording gage at site 0.2 mi downstream at same datum. Oct. 1, 1964, to Oct. 22, 1971, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

AVERAGE DISCHARGE.--79 years, 403 ft^3/s, 9.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft^3/s, Oct. 4, 1926, gage height, 18.50 ft, from graph based on gage readings, site then in use; maximum gage height, 18.55 ft, May 16, 1968; no flow Aug. 28, Sept. 3-18, 25-30, 1988, Oct. 31, Nov. 1, 1988

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	1930	*4,410	*14.36	No other peak greater than base discharge.			

No flow Oct. 30, 31, Nov. 1.

REVISIONS.--Revised daily discharges, in cubic feet per second, for a period in June 1988 are given below. These figures supersede those published in the report for 1988.

June 5....59
6....57
June 7....56
8....61
June 9....61
10....56
June 11....52
12....49

	TOTAL	MEAN	MAX	MIN	CFSM	IN.
June 1988	1178.9	39.3	72	9.1	0.07	0.08
Wtr Yr 1988	86045.52	235	2700	.00	.43	5.82

05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	e.00	26	250	108	e45	248	553	877	35	23	63
2	.08	e1.0	22	189	98	56	245	432	539	31	21	394
3	.03	17	22	147	88	76	820	362	436	30	19	417
4	.27	26	19	98	69	158	1530	319	384	30	17	286
5	.31	18	e13	94	33	388	1620	296	335	27	16	147
6	.25	e12	e14	115	e25	932	1480	266	292	25	14	93
7	e.20	e8.0	e12	140	e22	1040	1200	246	255	22	14	69
8	e.15	e4.0	e11	231	e20	752	762	217	226	18	13	108
9	e.11	e2.5	e9.0	552	e22	490	741	246	202	15	12	484
10	e.10	e7.0	e7.8	509	e24	491	739	307	176	13	11	888
11	e.10	17	e6.8	366	e26	389	635	285	158	11	13	970
12	e.10	30	e6.4	328	e28	386	531	251	147	9.8	9.4	714
13	e.10	35	e6.0	233	e30	372	457	227	142	10	8.5	396
14	e.11	44	e5.8	198	e33	347	405	208	134	8.3	8.4	301
15	e.12	35	e5.6	179	e35	330	377	192	120	7.2	8.5	337
16	.15	45	e5.4	169	e34	301	343	177	105	6.8	8.4	435
17	3.3	36	e5.4	154	e33	256	313	161	98	7.1	8.5	416
18	3.6	53	e5.2	138	e32	232	286	151	89	7.4	8.4	302
19	2.3	58	e5.2	128	e35	349	268	262	85	7.3	7.6	220
20	e1.3	62	e5.8	120	e38	451	247	983	78	11	8.1	174
21	e.80	53	12	111	e45	413	237	1260	75	39	8.5	147
22	e.45	87	28	104	e42	440	228	1180	69	104	13	127
23	12	166	71	99	e40	375	261	803	64	154	13	109
24	7.8	108	329	99	e37	333	276	602	59	125	15	98
25	e3.5	64	534	101	e35	306	246	685	53	85	16	87
26	e1.8	49	359	102	e43	281	227	2580	49	63	14	81
27	e.90	41	232	104	e40	258	238	3380	50	49	11	75
28	e.50	37	194	114	e35	250	817	4140	51	40	23	70
29	e.25	34	252	120	---	246	1130	3970	48	32	31	67
30	e.00	30	250	116	---	259	772	2880	43	29	14	62
31	e.00	---	230	115	---	264	---	1850	---	25	12	---
TOTAL	40.78	1179.50	2704.4	5523	1150	11266	17679	29471	5439	1076.9	419.3	8137
MEAN	1.32	39.3	87.2	178	41.1	363	589	951	181	34.7	13.5	271
MAX	12	166	534	552	108	1040	1620	4140	877	154	31	970
MIN	.00	.00	5.2	94	20	45	227	151	43	6.8	7.6	62
CFSM	.00	.07	.16	.32	.07	.66	1.07	1.73	.33	.06	.02	.49
IN.	.00	.08	.18	.37	.08	.76	1.20	1.99	.37	.07	.03	.55

CAL YR 1988 TOTAL 58906.10 MEAN 161 MAX 2130 MIN .00 CFSM .29 IN. 3.98
WTR YR 1989 TOTAL 84085.86 MEAN 230 MAX 4140 MIN .00 CFSM .42 IN. 5.69

e Estimated

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL

LOCATION.--Lat 40°00'08", long 88°38'07", in SE1/4 sec.21, T.18 N., R.5 E., Piatt County, Hydrologic Unit 07130006, at bridge on county road, 0.1 mi downstream from Wildcat Creek, 3.4 mi upstream from Willow Branch, 3.6 mi southwest of Monticello, and at mile 158.0.

DRAINAGE AREA.--573 mi^2.

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)
OCT											
31...	1000	17002	17002	0.0	841	8.10	5.0	9.3	8.5	14	--
DEC											
06...	1000	17002	17002	14	739	7.30	2.0	5.3	12.5	5	--
JAN											
24...	1000	17002	17002	96	728	8.20	2.0	2.5	13.5	4	--
FEB											
27...	1000	17002	17002	40	745	7.90	0.0	1.9	15.4	8	--
APR											
12...	1000	17002	17002	557	663	8.00	8.0	6.2	12.1	6	--
MAY											
15...	1000	17002	17002	192	695	7.90	13.0	9.8	9.4	12	--
JUN											
21...	0900	17002	17002	85	747	7.70	21.5	0.20	7.4	11	--
AUG											
02...	1000	17002	17002	21	708	7.80	23.0	13	6.8	12	--
25...	1100	17002	17002	17	755	7.70	22.0	24	5.6	16	3.0
SEP											
06...	1000	17002	17002	85	462	7.70	21.0	28	6.8	25	--

DATE	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT											
31...	K15	260	0	57	57	29	29	90	89	4.5	4.4
DEC											
06...	K20	320	96	75	74	33	32	35	35	3.3	3.2
JAN											
24...	K15	330	120	76	76	33	33	18	18	1.1	1.1
FEB											
27...	<2	360	150	83	82	38	38	26	26	1.4	1.4
APR											
12...	K25	330	160	79	77	34	33	8.5	8.3	0.5	0.44
MAY											
15...	350	330	130	79	76	36	34	11	10	1.1	0.77
JUN											
21...	K220	370	150	88	87	39	38	14	14	0.9	0.30
AUG											
02...	340	320	81	75	72	35	34	29	28	1	0.59
25...	--	330	82	72	74	36	36	33	--	2.9	2.0
SEP											
06...	K900	220	--	53	--	22	21	12	19	3.4	5.9

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT											
31...	298	27	85	0.3	471	1	1	0.930	<0.100	<0.002	--
DEC											
06...	221	79	--	0.2	--	6	2	5.60	0.220	<0.001	0.48
JAN											
24...	210	80	47	0.2	381	6	2	11.0	<0.100	<0.002	--
FEB											
27...	213	78	54	0.2	408	8	2	7.60	0.110	<0.001	0.49
APR											
12...	170	54	33	0.2	308	33	4	17.0	<0.100	<0.002	--
MAY											
15...	198	53	38	0.2	331	55	7	14.0	<0.100	<0.002	--
JUN											
21...	223	61	37	0.2	371	36	4	14.0	<0.100	<0.002	--
AUG											
02...	239	51	48	0.2	377	53	8	3.60	<0.100	<0.003	--
25...	251	59	57	0.3	--	50	7	0.160	0.120	0.003	0.68
SEP											
06...	147	39	24	0.3	--	130	16	3.30	0.140	0.003	0.96

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT											
31...	0.90	1.8	0.220	0.190	330	<50	8	80	75	<0.5	<0.5
DEC											
06...	0.70	6.3	0.170	0.140	210	<50	3	60	56	<0.5	<0.5
JAN											
24...	0.40	11	0.100	0.080	190	<50	1	60	55	<0.5	<0.5
FEB											
27...	0.60	8.2	0.110	0.090	180	80	1	50	47	<0.5	<0.5
APR											
12...	<0.10	--	0.070	0.040	680	60	<1	60	48	<0.5	<0.5
MAY											
15...	0.80	15	0.080	0.040	1100	130	1	70	54	<0.5	<0.5
JUN											
21...	0.80	15	0.130	0.050	1600	240	1	80	70	<1.0	<1
AUG											
02...	0.90	4.5	0.150	0.090	1300	<50	3	80	70	<0.5	<0.5
25...	0.80	0.96	0.170	0.110	1200	<50	2	80	74	<0.5	<0.5
SEP											
06...	1.1	4.4	0.220	0.130	1500	50	2	70	52	<0.5	<0.5

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
OCT											
31...	440	430	<3	<3	<5	<5	<5	<5	<5	<5	480
DEC											
06...	110	110	<3	<3	<5	<5	<5	<5	<5	<5	150
JAN											
24...	60	--	<3	<3	<5	<5	<5	<5	<5	<5	240
FEB											
27...	60	60	<3	<3	<5	6	<5	<5	7	<5	270
APR											
12...	<50	<50	<3	<3	5	<5	<5	<5	<5	<5	800
MAY											
15...	<50	<50	<3	<3	6	6	<5	<5	<5	<5	1300
JUN											
21...	50	<50	<3	<3	7	5	<5	<5	<5	<5	1700
AUG											
02...	100	100	<3	<3	7	<5	<5	<5	<5	<5	1700
25...	80	--	<3	<3	<5	<5	<5	<5	<5	<5	1600
SEP											
06...	60	60	<3	<3	75	<5	<5	<5	<5	<5	2400

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT										
31...	<50	<5	<5	37	18	<0.05	<5	<5	<3	<3.0
DEC										
06...	<50	27	<5	21	15	0.11	<5	<5	<3	<3.0
JAN										
24...	<50	<5	<5	22	14	<0.05	<5	<5	<3	<3.0
FEB										
27...	57	<5	<5	46	35	<0.05	<5	<5	<3	<3.0
APR										
12...	<50	<5	<5	36	<5	<0.05	<5	<5	<3	<3.0
MAY										
15...	<50	<5	<5	71	18	<0.05	6	<5	<3	<3.0
JUN										
21...	<50	<5	<5	64	<5	<0.05	8	<5	<3	<3.0
AUG										
02...	<50	<5	<5	88	9	<0.05	<5	<5	<3	<3.0
25...	<50	<5	<5	180	35	<0.05	10	<5	<3	<3.0
SEP										
06...	<50	<5	<5	120	15	<0.05	11	<10	<3	<3.0

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
31...	230	230	5	5	100	<50	7.7	<0.005	<5	1
DEC										
06...	180	180	<5	<5	<50	<50	5.4	<0.005	<5	<1
JAN										
24...	160	--	<5	<5	<50	<50	2.1	<0.005	5	1
FEB										
27...	160	160	<5	<5	<50	<50	3.7	<0.005	<5	<1
APR										
12...	130	120	<5	<5	<50	<50	3.2	<0.005	<5	1
MAY										
15...	140	140	<5	<5	<50	<50	3.9	<0.005	<0	1
JUN										
21...	150	150	6	<5	<50	<50	4.0	0.005	<5	<1
AUG										
02...	170	160	6	<5	<100	<100	5.6	<0.005	<5	--
25...	160	--	7	<5	120	<50	--	<0.005	<5	--
SEP										
06...	100	100	6	<5	230	<100	7.1	<0.005	<5	--

ILLINOIS RIVER BASIN

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL

LOCATION.--Lat 39°49'52", long 88°58'35", in NE1/4NE1/4 sec.21, T.16 N., R.2 E., Macon County, Hydrologic Unit 07130006, at south edge of Decatur, 1.2 mi downstream from dam and gage 05573505, 2.5 mi upstream from Stevens Creek, and at mile 129.0.

DRAINAGE AREA.--938 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 583.43 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Flow regulated by Lake Decatur Dam, 1.2 mi upstream. City of Decatur gage-height telemeter at station.

AVERAGE DISCHARGE.--7 years, 641 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft^3/s, Nov. 19, 1985, gage height, 22.61 ft; maximum gage height, 23.04 ft, May 2, 1983; no flow for many days in 1988-89 due to regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,160 ft^3/s, May 26, gage height, 19.62 ft; no flow for many days due to regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	.00	.00	.00	70	29	205	2090	3090	7.8	.68	80
2	4.7	.00	.00	.00	101	43	390	1640	2250	15	.50	12
3	1.7	.00	.00	.00	95	210	1420	1300	1820	17	.40	2.5
4	.95	8.1	.00	.00	83	269	2040	933	1520	15	.44	1.2
5	.70	2.1	.00	2.3	406	364	2160	933	956	14	.74	.78
6	.53	.00	.00	2.4	524	426	1810	1010	850	8.2	.87	.51
7	.22	.00	.00	3.8	79	49	1980	986	725	2.2	1.5	.28
8	.00	.00	.00	2.1	36	275	2010	454	556	.80	1.5	370
9	.00	6.8	.00	20	3.3	465	1870	1300	637	.24	1.6	813
10	.00	16	.00	15	.54	493	1430	712	322	.00	1.6	486
11	.00	.13	.00	10	.00	709	1480	738	528	.00	1.7	465
12	.00	11	78	60	.00	655	1230	643	638	.00	1.7	657
13	.00	1.8	22	30	.00	577	887	660	446	.00	1.4	438
14	.00	.00	.00	35	.00	445	748	731	481	.00	1.2	443
15	.00	3.7	.00	40	.00	382	760	564	483	.00	1.2	384
16	.00	33	.00	20	.00	364	579	411	188	.00	1.2	280
17	8.0	7.8	.00	10	.00	310	765	609	274	.00	1.1	269
18	5.2	9.2	.00	17	.00	274	480	634	467	.00	1.0	328
19	.33	2.3	.00	57	.00	291	441	375	284	.00	.98	203
20	.00	30	.00	113	.00	329	440	947	317	.00	1.1	7.8
21	.00	2.7	.00	45	4.5	505	446	1170	44	.03	1.2	2.2
22	.00	.02	34	35	21	513	329	1770	151	.00	40	1.1
23	9.5	.00	8.1	116	25	513	1370	1510	193	.00	5.8	.50
24	.63	.00	.00	44	26	576	1500	1390	30	.41	2.6	1.0
25	.00	.00	.00	104	24	455	1250	1400	83	.63	1.7	152
26	.00	.00	.00	69	24	243	912	3940	119	.05	1.3	148
27	.00	.00	2.0	143	23	198	1160	3030	189	.01	1.2	7.3
28	.00	.00	1.4	169	24	296	2050	3510	109	.01	11	1.9
29	.00	.00	.74	93	---	183	2720	3690	12	.05	7.0	.74
30	.00	.00	.72	6.1	---	186	2840	4180	6.0	.93	2.7	.15
31	.00	---	.30	1.3	---	625	---	3970	---	1.1	1.7	---
TOTAL	38.46	134.65	147.26	1263.00	1569.34	11252	37702	47230	17768.0	83.46	98.61	5555.96
MEAN	1.24	4.49	4.75	40.7	56.0	363	1257	1524	592	2.69	3.18	185
MAX	9.5	33	78	169	524	709	2840	4180	3090	17	40	813
MIN	.00	.00	.00	.00	.00	29	205	375	6.0	.00	.40	.15

CAL YR 1988 TOTAL 108626.69 MEAN 297 MAX 2930 MIN .00
WTR YR 1989 TOTAL 122842.74 MEAN 337 MAX 4180 MIN .00

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1965-66, 1968-69, 1971-77 are published in Water-Resources Investigations 78-23 and 79-24 as site E 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV											
01...	1100	17002	17002	0.0	786	6.90	6.0	8.2	0.8	48	>4000
30...	1200	17002	17002	0.0	862	6.80	5.0	9.8	3.0	36	K4000
JAN											
18...	1000	17002	17002	36	566	8.70	2.0	3.1	15.3	24	K100
FEB											
21...	1000	17002	17002	0.0	834	8.10	2.0	9.3	12.7	24	K3000
APR											
04...	1000	17002	17002	1910	608	8.20	10.0	5.0	11.4	8	350
MAY											
10...	1200	17002	17002	365	590	7.90	13.0	8.1	10.2	14	3400
JUN											
12...	1000	17002	17002	767	529	8.00	23.0	23	9.1	13	1900
JUL											
27...	1000	17002	17002	1.0	673	7.40	26.0	3.6	1.9	45	K7300
AUG											
24...	1000	17002	17002	2.6	632	7.50	24.0	14	0.6	37	>4000

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
NOV											
01...	350	360	76	76	39	40	38	38	3.8	3.8	100
30...	340	340	79	80	33	34	51	52	3.3	3.3	82
JAN											
18...	240	240	51	50	29	29	24	24	1.4	1.3	53
FEB											
21...	260	260	64	61	28	27	68	68	2.6	2.5	68
APR											
04...	290	290	66	65	31	30	14	14	1.1	0.88	59
MAY											
10...	290	290	67	67	29	29	11	11	1.8	1.4	46
JUN											
12...	250	250	64	60	26	24	6.5	6.1	2.5	2.2	36
JUL											
27...	210	210	51	50	21	21	53	52	3.6	3.8	64
AUG											
24...	170	170	39	38	17	17	63	62	4.2	3.4	60

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV											
01...	59	322	10	4	0.200	0.150	<0.001	0.390	0.190	100	<50
30...	76	328	9	5	0.110	0.980	<0.001	0.400	0.030	140	50
JAN											
18...	47	205	8	5	1.10	<0.100	<0.005	0.100	0.010	130	60
FEB											
21...	110	342	8	3	2.00	0.370	0.005	0.130	0.040	460	60
APR											
04...	39	208	9	2	8.10	0.160	0.005	0.060	0.020	360	150
MAY											
10...	34	189	33	6	10.0	0.140	0.003	0.130	0.080	950	80
JUN											
12...	22	151	21	3	12.0	0.160	0.008	0.190	0.100	2400	790
JUL											
27...	75	266	21	14	0.110	0.630	0.010	0.370	0.190	100	<50
AUG											
24...	79	260	20	9	<0.100	0.100	0.002	0.410	0.240	290	50

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
NOV											
01...	50	49	<0.5	<0.5	330	330	<3	<3	<5	<5	<5
30...	70	57	<0.5	<0.5	250	--	<3	<3	5	<5	<5
JAN											
18...	50	47	<0.5	<0.5	80	80	<3	<3	<5	<5	<5
FEB											
21...	50	44	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
APR											
04...	60	53	<0.5	<0.5	<50	<50	<3	<3	12	<5	<5
MAY											
10...	70	61	<0.5	<0.5	50	<50	--	--	6	<5	<5
JUN											
12...	80	63	<0.5	<0.5	<50	<50	<3	<3	5	<5	<5
JUL											
27...	50	41	<0.5	<0.5	160	150	<3	<3	7	<5	<5
AUG											
24...	40	31	<0.5	<0.5	110	100	<3	<3	<5	<5	<5

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
NOV											
01...	<5	<5	<5	1200	710	<5	<5	390	380	<5	<5
30...	<5	<5	<5	2600	690	<5	<5	540	--	<5	<5
JAN											
18...	<5	<5	<5	160	<50	<5	<5	59	5	<5	<5
FEB											
21...	<5	9	<5	1000	<50	13	<5	140	120	<5	6
APR											
04...	<5	<5	<5	320	<50	<5	<5	44	<5	<5	<5
MAY											
10...	<5	<5	<5	1100	<50	<5	<5	82	26	6	<5
JUN											
12...	<5	6	<5	2000	<50	<5	<5	69	<5	<5	<5
JUL											
27...	<5	<5	<5	420	58	<5	<5	300	180	<5	<5
AUG											
24...	<5	<5	<5	1000	390	6	<5	220	210	<5	<5

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV										
01...	<3	<3.0	200	200	<5	<5	<50	<50	20	2
30...	<3	<3.0	200	--	<5	<5	<50	<50	16	2
JAN										
18...	<3	<3.0	130	120	<5	<5	<50	<50	8.8	1
FEB										
21...	<3	<3.0	150	140	<5	<5	<100	<100	11	1
APR										
04...	<3	<3.0	130	130	<5	<5	<50	<50	4.0	2
MAY										
10...	<3	<3.0	120	120	<5	<5	<50	<50	4.4	<1
JUN										
12...	<3	<3.0	110	100	6	<5	<50	<50	5.2	2
JUL										
27...	<3	<3.0	150	140	<5	<5	<50	<50	15	--
AUG										
24...	<3	<3.0	100	98	<5	<5	<50	--	17	--

05573650 SANGAMON RIVER NEAR NIANTIC, IL

LOCATION.--Lat 39°47'48", long 89°06'15", in NE1/4 sec.32, T.16 N., R.1 E., Macon County, Hydrologic Unit 07130006, at Lincoln Trail Bridge in Lincoln Homestead Memorial Park, 5.0 mi southeast of Niantic, 7.3 mi upstream from Old River, 9.2 mi downstream from Stevens Creek, and at mile 116.9.

DRAINAGE AREA.--1,054 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site E 05.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
NOV												
01...	0900	17002	17002	14	3200	6.80	9.0	7.7	1.5	89	>20000	280
30...	1300	17002	17002	17	2820	7.00	7.0	6.9	3.8	55	1200	280
JAN												
18...	1200	17002	17002	113	1590	8.10	7.0	2.7	12.2	30	5000	270
FEB												
21...	1100	17002	17002	60	2190	7.90	7.0	1.8	11.2	32	1100	320
APR												
04...	1200	17002	17002	2680	645	8.00	10.0	13	10.0	23	5600	260
MAY												
10...	0900	17002	17002	990	643	7.70	13.0	10	9.4	17	5400	280
JUN												
12...	1200	17002	17002	438	782	7.90	23.0	12	7.9	20	2400	280
JUL												
27...	1100	17002	17002	24	2700	7.70	27.5	3.3	5.9	30	K200	280
AUG												
24...	1200	17002	17002	44	1300	7.60	24.5	8.0	4.9	21	1100	190

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
NOV											
01...	0	53	53	36	35	590	580	21	20	304	350
30...	8	58	59	32	32	420	--	18	18	272	280
JAN											
18...	36	57	56	32	32	220	220	8.5	8.2	236	170
FEB											
21...	61	67	67	37	37	360	360	16	17	259	230
APR											
04...	86	67	60	31	27	25	23	2.2	1.5	175	65
MAY											
10...	120	67	66	30	29	26	26	2.1	2.5	167	52
JUN											
12...	280	71	66	29	27	55	55	4.4	4.2	--	64
JUL											
27...	65	57	58	32	32	480	--	22	22	212	300
AUG											
24...	47	41	40	22	22	190	190	7.3	6.9	144	120

05573650 SANGAMON RIVER NEAR NIANTIC, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV											
01...	670	1890	1	<1	<0.100	10.0	0.011	5.20	5.00	80	<50
30...	550	--	3	3	0.410	8.20	0.013	3.50	3.20	150	110
JAN											
18...	260	878	17	7	4.80	0.280	0.005	1.70	1.60	190	60
FEB											
21...	390	1260	7	3	5.70	0.400	0.005	2.10	1.90	170	120
APR											
04...	49	331	104	11	7.90	0.250	0.005	0.250	0.090	1600	90
MAY											
10...	48	324	54	5	10.0	0.140	0.002	0.283	0.220	1200	<50
JUN											
12...	72	289	26	4	12.0	0.140	0.006	0.688	0.530	2900	840
JUL											
27...	510	--	9	2	6.30	<0.100	<0.003	6.20	6.20	230	70
AUG											
24...	220	701	12	3	3.80	0.200	0.005	2.50	2.30	360	70

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
NOV											
01...	40	32	<0.5	<0.5	330	320	<3	<3	<5	<5	<5
30...	40	32	<0.5	<0.5	220	--	<3	<3	8	6	<5
JAN											
18...	50	40	<0.5	<0.5	140	140	<3	<3	<5	<5	<5
FEB											
21...	40	35	<0.5	<0.5	170	170	<3	<3	7	6	<5
APR											
04...	70	49	<0.5	<0.5	50	<50	<3	<3	13	<5	<5
MAY											
10...	70	59	<0.5	<0.5	<50	<50	--	--	8	7	<5
JUN											
12...	90	67	<0.5	<0.5	60	60	<3	<3	5	<5	<5
JUL											
27...	40	42	<0.5	<0.5	150	150	<3	<3	<5	<5	<5
AUG											
24...	40	31	<0.5	<0.5	90	80	<3	<3	<5	<5	<5

05573650 SANGAMON RIVER NEAR NIANTIC, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
NOV											
01...	<5	<5	<5	950	550	<5	<5	290	280	0.14	13
30...	<5	<5	<5	1000	640	<5	<5	300	300	--	15
JAN											
18...	<5	<5	<5	450	75	<5	<5	100	73	<0.05	<5
FEB											
21...	<5	<5	<5	400	140	<5	<5	100	95	0.06	9
APR											
04...	<5	8	<5	2300	<50	6	<5	98	22	<0.05	9
MAY											
10...	<5	12	6	1600	<50	<5	<5	76	<5	<0.05	<5
JUN											
12...	<5	22	<5	3500	<50	7	<5	140	<5	0.09	<5
JUL											
27...	<5	<5	<5	210	<50	<5	<5	62	48	0.09	9
AUG											
24...	<5	<5	<5	460	<50	<5	<5	51	19	<0.05	<5

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV											
01...	13	<3	<3.0	140	140	<5	<5	<50	<50	34	2
30...	13	<3	<3.0	150	160	<5	<5	<50	<50	24	2
JAN											
18...	<5	<3	<3.0	150	140	<5	<5	<50	<50	13	1
FEB											
21...	10	<3	<3.0	160	160	<5	<5	<100	<100	14	<1
APR											
04...	<5	<3	<3.0	130	120	<5	<5	<50	<50	5.7	1
MAY											
10...	<5	<3	<3.0	120	120	<5	<5	<50	<50	--	2
JUN											
12...	<5	<3	<3.0	120	120	6	<5	<50	<50	6.1	1
JUL											
27...	9	<3	<3.0	160	--	<5	<5	<50	<50	14	--
AUG											
24...	<5	<3	<3.0	100	99	<5	<5	110	<100	8.7	--

05573800 SANGAMON RIVER AT ROBY, IL

LOCATION.--Lat 39°44'32", long 89°23'57", in SE1/4SW1/4 sec.14, T.15 N., R.3 W., Sangamon County, Hydrologic Unit 07130006, at bridge on county road, 0.1 mi north of Roby, 7.2 mi upstream from Buckhart Creek, 8.1 mi downstream from Mosquito Creek, and at mile 98.5.

DRAINAGE AREA.--1,264 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1965-66, 1968-69, 1971-72 are published in Water-Resources Investigations 78-23 as site E 16.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV												
03...	0900	17002	17002	39	3040	8.30	7.0	--	8.0	68	13	K180
DEC												
01...	1000	17002	17002	48	2270	7.50	2.0	6.6	9.6	43	6.0	>2000
JAN												
19...	1000	17002	17002	163	2300	8.00	3.0	4.3	11.4	30	--	580
FEB												
22...	1000	17002	17002	98	1820	9.30	1.0	0.60	14.0	29	--	K160
APR												
13...	0900	17002	17002	67	709	7.70	8.5	7.6	10.2	14	--	600
MAY												
17...	1000	17002	17002	635	745	8.10	17.0	9.5	9.2	18	--	860
JUN												
22...	1000	17002	17002	214	806	7.70	23.5	1.4	7.6	14	--	K280
AUG												
03...	1100	17002	17002	59	1910	8.60	27.0	4.7	12.3	39	--	K100
SEP												
19...	1030	17002	17002	488	756	8.10	15.5	3.0	10.3	18	--	1100

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)
NOV												
03...	290	0	--	59	59	35	34	560	550	19	19	308
DEC												
01...	320	56	--	72	70	35	34	350	--	15	15	259
JAN												
19...	290	--	<1.0	62	--	33	--	340	--	12	12	260
FEB												
22...	310	51	--	68	66	34	34	280	280	12	11	254
APR												
13...	290	130	--	69	68	31	30	29	29	1.9	1.6	161
MAY												
17...	310	130	--	75	72	33	32	31	31	2.6	1.8	184
JUN												
22...	320	120	--	76	76	32	32	46	47	2.9	2.4	206
AUG												
03...	300	58	--	65	64	35	35	390	390	12	12	246
SEP												
19...	270	81	--	54	54	32	32	46	47	2.8	2.6	186

05573600 SANGAMON RIVER AT ROBY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
NOV 03...	330	670	1850	6	2	1.30	2.40	0.072	4.50	4.40	110
DEC 01...	260	430	--	11	4	2.10	5.30	0.017	3.10	2.80	300
JAN 19...	240	430	--	14	4	8.30	0.720	0.008	2.90	2.70	320
FEB 22...	210	300	1050	10	4	3.40	0.420	0.067	1.60	1.40	160
APR 13...	68	54	347	48	6	13.0	0.140	0.001	0.320	0.220	850
MAY 17...	54	60	361	52	8	12.0	<0.100	<0.004	0.520	0.380	1100
JUN 22...	70	68	419	5	3	10.0	<0.100	<0.003	0.490	0.430	1200
AUG 03...	240	430	1320	47	17	2.70	<0.100	<0.022	2.86	2.28	510
SEP 19...	100	74	425	56	7	1.70	<0.100	<0.004	0.400	0.350	1100

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
NOV 03...	<50	40	39	<0.5	<0.5	240	230	<3	<3	<5	<5
DEC 01...	60	60	46	<0.5	<0.5	210	200	<3	<3	7	<5
JAN 19...	90	70	55	<0.5	<0.5	180	--	<3	<3	<5	<5
FEB 22...	80	40	35	<0.5	<0.5	150	150	11	<3	7	6
APR 13...	90	60	55	<0.5	<0.5	<50	<50	<3	<3	<5	<5
MAY 17...	100	70	60	<0.5	<0.5	50	50	<3	<3	<5	<5
JUN 22...	200	80	74	<1.0	<1	50	50	<3	<3	7	6
AUG 03...	80	60	50	<0.5	<0.5	120	120	<3	<3	6	<5
SEP 19...	80	70	55	<0.5	<0.5	70	70	<3	<3	<5	<5

05573800 SANGAMON RIVER AT ROBY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV											
03...	<5	<5	<5	<5	830	590	<5	<5	500	470	<0.05
DEC											
01...	<5	<5	<5	<5	1700	690	<5	<5	650	600	<0.05
JAN											
19...	<5	<5	5	<5	690	130	<5	<5	160	140	<0.05
FEB											
22...	<5	<5	<5	<5	430	110	<5	<5	180	160	<0.05
APR											
13...	<5	<5	<5	<5	1200	<50	<5	<5	77	8	<0.05
MAY											
17...	<5	<5	8	<5	1600	<50	<5	<5	110	6	0.06
JUN											
22...	<5	<5	<5	<5	1200	<50	<5	<5	87	21	<0.05
AUG											
03...	<5	<5	<5	<5	620	<50	<5	<5	350	250	<0.05
SEP											
19...	<5	<5	5	<5	1500	<50	<5	<5	120	9	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV											
03...	11	12	<3	<3.0	140	140	<5	<5	<100	<100	2
DEC											
01...	8	7	<3	<3.0	160	150	<5	<5	<50	<50	2
JAN											
19...	11	5	<3	<3.0	150	--	<5	<5	<100	<100	1
FEB											
22...	10	11	<3	<3.0	150	140	<5	<5	<100	<100	<1
APR											
13...	<5	<5	<3	<3.0	130	130	<5	<5	<50	<50	<1
MAY											
17...	5	6	<3	<3.0	140	140	<5	<5	<50	<50	<1
JUN											
22...	12	<5	<3	<3.0	130	130	6	<5	<50	<50	<1
AUG											
03...	9	--	<3	<3.0	150	140	8	6	<50	<50	<1
SEP											
19...	6	<5	<3	<3.0	120	120	8	<5	<50	<50	<1

05574500 FLAT BRANCH NEAR TAYLORVILLE, IL

LOCATION.--Lat 39°33'14", long 89°15'12", in SE1/4SE1/4 sec.24, T.13 N., R.2 W., Christian County, Hydrologic Unit 07130007, on right bank at downstream side of bridge on old State Highway 29, 1.4 mi east of Taylorville and at mile 1.6.

DRAINAGE AREA.--276 mi^2.

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EOH 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
DEC											
01...	1130	17002	17002	--	694	7.50	3.0	5.9	12.7	18	K140
JAN											
03...	1130	17002	17002	--	676	8.20	1.0	6.8	15.2	7	190
FEB											
14...	1200	17002	17002	--	690	8.20	1.0	0.50	14.2	8	54
MAR											
23...	1130	17002	17002	--	482	8.10	7.0	82	12.3	22	K300
MAY											
02...	1130	17002	17002	597	409	7.90	14.0	140	7.8	30	K900
31...	1100	17002	17002	589	536	7.30	22.0	39	7.5	17	K300
JUL											
18...	1100	17002	17002	1.4	603	7.90	24.0	48	7.0	32	K250
AUG											
28...	1130	17002	17002	0.0	654	7.80	25.5	20	6.1	20	K100

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
DEC											
01...	290	100	70	68	29	28	37	36	3.3	3.0	181
JAN											
03...	280	100	64	65	27	28	19	19	1.5	1.4	174
FEB											
14...	330	120	76	75	34	34	21	21	1.1	1.1	204
MAR											
23...	210	110	50	50	21	21	12	12	1.9	1.7	106
MAY											
02...	170	96	46	41	20	17	7.9	7.4	3.8	2.7	77
31...	230	90	58	57	22	21	10	10	2.3	1.7	139
JUL											
18...	290	55	64	61	35	33	19	19	1.8	1.6	234
AUG											
28...	280	82	68	65	30	29	25	25	1.9	1.7	200

05574500 FLAT BRANCH NEAR TAYLORVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
DEC											
01...	76	13	5	3.20	<0.100	<0.001	0.450	0.370	770	<50	100
JAN											
03...	69	8	4	7.10	0.180	0.003	0.220	0.150	250	70	80
FEB											
14...	74	5	1	7.00	<0.100	<0.001	0.100	0.070	140	<50	70
MAR											
23...	45	56	8	9.30	0.240	0.005	0.260	0.130	2100	<50	60
MAY											
02...	33	89	13	8.50	0.320	0.007	0.440	0.240	5200	90	100
31...	33	59	8	11.0	0.190	0.002	0.220	0.150	2100	250	100
JUL											
18...	47	68	17	<0.100	<0.100	<0.004	0.230	0.070	2600	<50	100
AUG											
28...	65	41	7	3.00	<0.100	<0.004	0.170	0.110	1500	60	100

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
DEC										
01...	86	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
JAN										
03...	81	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
FEB										
14...	69	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAR										
23...	25	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<10
MAY										
02...	67	<0.5	<0.5	<50	<50	--	--	7	<5	<5
31...	89	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JUL										
18...	90	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
AUG										
28...	91	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5

05574500 FLAT BRANCH NEAR TAYLORVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
DEC										
01...	<5	<5	<5	850	<50	<5	<5	120	93	<0.05
JAN										
03...	<5	<5	<5	300	<50	9	<5	73	66	<0.05
FEB										
14...	<5	<5	<5	260	<50	<5	<5	100	99	<0.05
MAR										
23...	<10	<5	<5	2300	<50	<5	<5	91	24	<0.05
MAY										
02...	<5	<5	<5	5800	<50	<5	<5	120	11	<0.05
31...	<5	<5	<5	2100	<50	<5	<5	81	22	<0.05
JUL										
18...	<5	<5	<5	2900	<50	<5	<5	500	160	<0.05
AUG										
28...	<5	<5	<5	1500	<50	<5	<5	210	87	0.07

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC										
01...	<5	<5	<3	<3.0	160	160	<5	<5	<100	<100
JAN										
03...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
FEB										
14...	<5	<5	<3	<3.0	170	170	<5	<5	<50	<50
MAR										
23...	<5	<5	<3	<3.0	120	110	<10	<10	<50	<50
MAY										
02...	<5	<5	<3	<3.0	120	100	10	<5	<50	<50
31...	5	<5	<3	<3.0	150	140	5	<5	<50	<50
JUL										
18...	<5	<5	<3	<3.0	170	160	7	6	<50	<50
AUG										
28...	<10	<10	<3	<3.0	140	130	8	7	<100	--

05575500 SOUTH FORK SANGAMON RIVER AT KINCAID, IL

LOCATION.--Lat 39°34'44", long 89°23'31", in SW1/4NE1/4 sec.14, T.13 N., R.3 W., Christian County, Hydrologic Unit 07130007, at bridge on State Highway 104, 1.0 mi southeast of Kincaid, 5.0 mi upstream from Panther Creek, 5.6 mi upstream from Bear Creek, and at mile 37.8.

DRAINAGE AREA.--562 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EO 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
26...	1230	17002	17002	20	2050	6.70	9.0	81	4.4	67	K40	220
DEC												
01...	1230	17002	17002	35	598	7.10	4.0	12	11.6	23	K110	240
JAN												
03...	1230	17002	17002	60	695	7.40	1.0	25	14.5	12	K5	270
FEB												
14...	1300	17002	17002	60	813	7.80	1.0	23	13.5	14	K6	330
MAR												
23...	1230	17002	17002	739	493	8.20	7.0	44	12.1	20	K160	200
MAY												
02...	1230	17002	17002	1030	416	7.90	15.0	130	8.0	31	K900	170
31...	1200	17002	17002	1780	417	7.00	22.5	50	5.2	19	K150	170
JUL												
18...	1200	17002	17002	5.0	992	6.90	24.0	110	5.0	28	<100	330
AUG												
28...	1230	17002	17002	3.0	1560	6.60	26.5	84	3.3	40	K50	310

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT												
26...	180	41	40	30	29	340	330	19	19	39	530	280
DEC												
01...	130	56	55	25	25	27	28	4.2	3.8	115	120	39
JAN												
03...	120	63	62	28	28	31	31	2.6	2.5	148	110	51
FEB												
14...	150	75	75	34	34	48	48	2.9	2.9	180	140	69
MAR												
23...	86	50	48	21	20	16	15	2.3	2.0	117	55	34
MAY												
02...	92	46	40	19	16	11	9.9	4.1	2.6	74	40	26
31...	75	45	44	15	14	9.2	9.1	3.6	3.3	93	30	24
JUL												
18...	190	71	69	40	39	81	78	9.1	8.5	143	240	94
AUG												
28...	260	60	60	40	40	200	200	18	18	57	440	180

05575500 SOUTH FORK SANGAMON RIVER AT KINCAID, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)
OCT												
26...	1270	63	17	<0.100	2.00	0.002	3.2	5.2	--	0.980	0.050	740
DEC												
01...	346	94	16	2.80	1.20	0.002	0.70	1.9	4.7	0.030	0.010	3000
JAN												
03...	374	22	7	7.10	0.250	<0.001	0.65	0.90	8.0	0.080	0.030	430
FEB												
14...	480	15	4	5.50	0.650	0.004	0.55	1.2	6.7	0.140	0.020	220
MAR												
23...	245	79	10	6.20	0.180	0.004	1.0	1.2	7.4	0.200	0.070	1400
MAY												
02...	179	129	16	7.60	0.260	0.006	--	<0.10	--	0.370	0.160	6000
31...	181	26	5	7.60	<0.100	<0.001	--	1.1	8.7	0.273	0.200	2000
JUL												
18...	616	74	13	0.410	0.640	0.003	0.06	0.70	1.1	0.090	0.010	910
AUG												
28...	994	52	12	0.110	1.40	0.004	1.1	2.5	2.6	0.030	<0.010	470

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)
OCT												
26...	50	60	26	<0.5	<0.5	460	450	<3	<3	<5	<5	<5
DEC												
01...	<50	100	55	<0.5	<0.5	90	90	<3	<3	6	<5	<5
JAN												
03...	70	80	69	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
FEB												
14...	<50	70	62	<0.5	<0.5	80	80	<3	<3	<5	<5	<5
MAR												
23...	90	40	20	<0.5	<0.5	150	140	<3	<3	<5	<5	<5
MAY												
02...	60	100	64	<0.5	<0.5	50	<50	--	--	8	<5	<5
31...	190	100	81	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JUL												
18...	90	100	91	<0.5	<0.5	120	120	<3	<3	<5	<5	<5
AUG												
28...	100	90	86	<0.5	<0.5	290	290	<3	<3	<5	<5	<5

05575500 SOUTH FORK SANGAMON RIVER AT KINCAID, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT											
26...	<5	<5	<5	31000	21000	<5	<5	1800	1700	<0.05	<5
DEC											
01...	<5	<5	<5	13000	4700	<5	<5	410	360	<0.05	<5
JAN											
03...	<5	<5	<5	4000	2400	<5	<5	210	200	0.05	<5
FEB											
14...	<5	<5	<5	4500	3400	<5	<5	310	310	<0.05	7
MAR											
23...	<5	<5	<5	2000	<50	<5	<5	110	59	<0.05	<5
MAY											
02...	<5	6	<5	6900	<50	<5	<5	190	44	0.06	7
31...	<5	<5	<5	2000	<50	<5	<5	58	15	<0.05	<5
JUL											
18...	<5	<5	<5	16000	1200	<5	<5	1500	1400	<0.05	6
AUG											
28...	<5	<5	<5	23000	9000	<5	<5	2400	2400	<0.05	<10

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
26...	<5	<3	<3.0	120	110	170	180	<100	<100	29	<1
DEC											
01...	<5	<3	<3.0	130	130	7	<5	100	<100	8.1	2
JAN											
03...	<5	<3	<3.0	160	150	<5	<5	<50	<50	6.1	1
FEB											
14...	<5	<3	<3.0	170	170	<5	<5	<50	<50	5.7	<1
MAR											
23...	<5	<3	<3.0	120	120	<5	<5	<50	<50	7.7	<1
MAY											
02...	<5	<3	<3.0	120	110	12	<5	<50	<50	11	1
31...	<5	<3	<3.0	120	120	<5	<5	<50	<50	7.7	2
JUL											
18...	<5	<3	<3.0	190	180	<5	<5	<50	<50	--	--
AUG											
28...	<10	<3	<3.0	160	160	<5	<5	<100	<100	15	--

05576000 SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL

LOCATION.--Lat 39°44'32", long 89°34'02", in NE1/4NW1/4 sec.20, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, on right bank at city of Springfield dam, 100 ft downstream from Horse Creek, 1.7 mi southwest of Rochester, and at mile 7.4.

DRAINAGE AREA.--867 mi^2.

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 511.30 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1964, water-stage recorder, and Oct. 1, 1964, to Apr. 12, 1966, nonrecording gage, at site 2.2 mi downstream at same datum. Auxiliary water-stage recorder at site 1.2 mi downstream. May 19, 1950, to Apr. 29, 1975, auxiliary nonrecording gage at same site. Prior to May 19, 1950, auxiliary nonrecording gage at site 6.2 mi downstream.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Beginning Apr. 14, 1955, diversion above station for Springfield municipal supply during some years. Occasional regulation caused by operation of gate at diversion dam. Illinois Department of Transportation, Division of Water Resources, gage-height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCAHRGE.--40 years, 576 ft^3/s, 9.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,100 ft^3/s, July 1, 1957, site then in use; maximum gage height, 31.92 ft, Apr. 14, 1979; no flow Nov. 4-6, 1985, Sept. 9, 1987, and for many days in 1988-89.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,800 ft^3/s, May 31, gage height, 17.14 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	2.0	.00	e.90	20	32	97	1230	1800	58	5.5	14
2	.72	2.1	.00	e1.4	20	65	138	1210	1670	43	15	128
3	.72	2.1	.00	e2.2	21	5.9	552	930	1450	20	9.1	114
4	.72	64	.00	e3.2	6.2	28	1190	784	1150	9.2	7.4	103
5	.72	21	.00	e5.0	.72	28	1370	703	794	8.0	6.1	42
6	7.9	.00	.00	e8.0	.00	27	1500	555	564	7.4	5.3	4.4
7	3.6	.00	.00	e12	9.4	33	1580	435	440	6.7	5.2	3.6
8	.28	.00	.00	e20	2.3	18	1650	487	368	6.4	32	2.0
9	.00	.02	.00	e30	.00	33	1670	370	313	5.9	19	145
10	.00	.16	.00	e45	.00	47	1540	438	277	5.4	15	186
11	.00	.04	.00	64	.00	73	1310	395	234	47	10	295
12	.00	.82	.00	98	.00	135	1090	434	221	12	8.9	150
13	.00	.94	.00	24	.00	293	923	422	222	11	7.5	79
14	.00	.58	.00	11	.00	408	759	349	207	10	6.1	31
15	.00	.29	.00	1.7	.00	475	600	211	192	9.5	4.9	19
16	.13	1.1	.00	.00	.00	441	507	215	107	9.1	4.1	60
17	5.2	58	.00	.00	.00	340	437	225	73	12	4.1	92
18	2.5	191	.00	.15	.00	250	411	208	131	10	3.9	38
19	1.1	168	.00	.01	.00	175	353	186	103	9.0	3.4	4.9
20	.65	203	e.50	.00	e.20	105	304	227	52	8.4	2.9	4.9
21	.39	234	e3.5	.00	e.35	162	279	243	58	8.6	2.5	4.0
22	.00	285	e15	.00	e.65	236	263	349	39	8.4	2.3	2.7
23	.30	179	e100	.00	e1.2	394	254	489	40	16	2.3	2.1
24	.36	186	e60	.00	e2.0	412	330	450	43	17	2.2	2.0
25	.36	136	e40	.00	e3.5	386	356	470	38	9.2	2.0	2.0
26	.43	92	e25	.00	e6.0	299	316	1230	19	6.8	2.0	1.8
27	.60	10	e15	.00	e12	220	331	1490	12	6.0	1.8	1.8
28	1.0	.23	e8.0	.00	e20	190	477	1630	232	6.0	1.7	1.8
29	1.2	.00	e5.0	.00	---	141	913	1750	221	6.0	1.6	1.7
30	1.4	.00	e2.5	.00	---	138	1000	1780	102	5.8	1.5	1.6
31	1.7	---	e1.5	4.3	---	79	---	1800	---	5.5	1.2	---
TOTAL	32.72	1837.38	276.00	330.86	125.52	5668.9	22500	21695	11172	403.3	196.5	1537.3
MEAN	1.06	61.2	8.90	10.7	4.48	183	750	700	372	13.0	6.34	51.2
MAX	7.9	285	100	98	21	475	1670	1800	1800	58	32	295
MIN	.00	.00	.00	.00	.00	5.9	97	186	12	5.4	1.2	1.6
CFSM	.00	.07	.01	.01	.01	.21	.87	.81	.43	.02	.01	.06
IN.	.00	.08	.01	.01	.01	.24	.97	.93	.48	.02	.01	.07

CAL YR 1988 TOTAL 120536.03 MEAN 329 MAX 3430 MIN .00 CFSM .38 IN. 5.17
WTR YR 1989 TOTAL 65775.48 MEAN 180 MAX 1800 MIN .00 CFSM .21 IN. 2.82

e Estimated

05576022 SOUTH FORK SANGAMON RIVER BELOW ROCHESTER, IL

LOCATION.--Lat 39°45'50", long 89°33'43", in NW1/4SE1/4 sec.8, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, at State Highway 29 bridge, 1.7 mi northwest of Rochester, 1.8 mi upstream from Black Branch, 2.2 mi downstream from Horse Creek, and at mile 5.0.

DRAINAGE AREA.--870 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EO 01.

REVISED RECORDS.--WDR IL-79-2: Drainage area.

REMARKS.--Water discharges were determined from South Fork Sangamon River near Rochester (station 05576000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV 03...	1100	17002	17002	2.3	736	7.10	6.0	--	6.3	26	K10
DEC 01...	1100	17002	17002	0.0	340	7.10	3.0	66	9.5	28	K60
JAN 19...	1100	17002	17002	0.24	618	7.80	2.0	24	12.0	12	K20
FEB 22...	1100	17002	17002	0.65	775	8.10	0.0	90	13.7	15	K10
APR 13...	1045	17002	17002	923	517	7.50	8.5	34	10.0	17	380
MAY 17...	1100	17002	17002	242	636	7.70	17.0	26	9.1	16	K120
JUN 22...	1100	17002	17002	53	717	7.60	23.5	3.7	8.3	16	K200
AUG 03...	1300	17002	17002	9.3	843	7.70	26.5	19	3.3	26	K550
SEP 19...	1200	17002	17002	9.0	599	8.00	18.0	14	10.1	22	K450

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
NOV 03...	300	60	68	67	32	32	46	46	4.1	4.1	240
DEC 01...	110	39	33	27	14	11	17	14	4.2	2.7	74
JAN 19...	250	100	58	57	26	25	23	24	2.0	1.9	145
FEB 22...	320	140	73	72	33	33	41	40	2.9	2.8	178
APR 13...	220	120	54	53	23	22	14	14	2.3	1.6	105
MAY 17...	290	130	68	67	30	29	18	17	1.7	1.3	159
JUN 22...	320	130	74	73	33	33	26	26	2.7	2.0	187
AUG 03...	320	120	73	70	35	34	56	55	4.7	3.9	193
SEP 19...	170	71	42	40	17	16	31	30	8.0	7.7	95

05576022 SOUTH FORK SANGAMON RIVER BELOW ROCHESTER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
NOV 03...	63	4	2	0.470	<0.100	<0.001	0.460	0.340	330	<50	80
DEC 01...	46	36	7	1.80	0.920	0.001	0.770	0.380	5900	<50	100
JAN 19...	86	39	5	6.80	0.820	0.005	0.320	0.180	900	<50	90
FEB 22...	120	37	6	4.80	1.20	0.013	0.430	0.270	210	60	60
APR 13...	56	96	8	11.0	0.240	0.001	0.240	0.080	2200	110	100
MAY 17...	64	60	8	8.80	<0.100	<0.002	0.110	0.040	1600	110	100
JUN 22...	82	42	5	7.40	<0.100	<0.002	0.170	0.050	2100	200	100
AUG 03...	130	116	22	<0.100	0.290	0.009	0.198	0.100	1300	<50	200
SEP 19...	88	57	9	1.10	0.380	0.013	0.174	0.080	1800	50	100

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
NOV 03...	72	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
DEC 01...	38	<0.5	<0.5	50	<50	<3	<3	11	<5	<5
JAN 19...	70	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
FEB 22...	55	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
APR 13...	68	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAY 17...	88	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JUN 22...	100	<1.0	<1	60	60	<3	<3	7	6	<5
AUG 03...	130	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
SEP 19...	85	<0.5	<0.5	90	90	<3	<3	<5	<5	<5

05576022 SOUTH FORK SANGAMON RIVER BELOW ROCHESTER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV										
03...	<5	<5	<5	720	180	<5	<5	410	370	<0.05
DEC										
01...	<5	11	<5	6600	<50	<5	<5	290	170	<0.05
JAN										
19...	<5	<5	<5	1700	<50	<5	<5	180	150	<0.05
FEB										
22...	<5	<5	<5	1900	140	<5	<5	210	200	<0.05
APR										
13...	<5	<5	<5	3200	58	<5	<5	140	55	<0.05
MAY										
17...	<5	<5	<5	2000	79	<5	<5	200	120	<0.05
JUN										
22...	<5	<5	<5	2300	<50	<5	<5	230	120	<0.05
AUG										
03...	<5	<5	<5	2000	<50	<5	<5	890	710	0.36
SEP										
19...	<5	<5	<5	3400	82	<5	<5	610	510	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV										
03...	<5	<5	<3	<3.0	160	150	<5	<5	<100	<100
DEC										
01...	7	<5	<3	<3.0	80	61	11	<5	100	<50
JAN										
19...	<5	<5	<3	<3.0	150	150	<5	<5	<50	<50
FEB										
22...	<5	<5	<3	<3.0	170	170	<5	<5	<100	<50
APR										
13...	<5	<5	<3	<3.0	150	140	<5	<5	<50	<50
MAY										
17...	9	<5	<3	<3.0	180	170	<5	<5	<50	<50
JUN										
22...	10	10	<3	<3.0	190	180	7	<5	<50	<50
AUG										
03...	<5	<5	<3	<3.0	200	190	7	5	130	<50
SEP										
19...	<5	<5	<3	<3.0	110	110	7	<5	<50	<50

05576500 SANGAMON RIVER AT RIVERTON, IL

LOCATION.--Lat 39°50'34", long 89°32'52", in NW1/4NE1/4 sec.16, T.16 N., R.4 W., Sangamon County, Hydrologic Unit 07130008, at abutment on old U.S. Highway 36 bridge in Riverton, 2.2 mi downstream from Sugar Creek, 5.6 mi upstream from Fancy Creek, and at mile 83.1.

DRAINAGE AREA.--2,618 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1908 to December 1912, August 1914 to October 1956, and annual maximum, water years 1957-85. January 1986 to current year.

REVISED RECORD.--WSP 1208: 1908-9, 1921-22, 1926-27, 1947. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 508.38 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 14, 1934, chain gage on Wabash Railway bridge, 1,450 ft downstream, at datum 5.61 ft lower.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Some regulation by municipal reservoirs at Decatur (since 1922) and at Springfield (since 1934). U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years (water years 1909-12, 1915-56, 1987-89), 1,650 ft^3/s, 8.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,700 ft^3/s, May 19, 1943, gage height, 31.52 ft (from graph based on gage readings); minimum, 3.0 ft^3/s, Oct. 3-15, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.--The high water of 1883 reached a stage of approximately 32 ft with respect to the gage at the Wabash Railway bridge. The high water of 1875 is said to have been about one-half foot lower.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,050 ft^3/s, June 1, gage height, 15.70 ft; minimum daily, 25 ft^3/s, Dec. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	47	51	e88	159	e170	660	4200	6030	274	90	572
2	59	42	49	e80	165	266	607	3990	5860	231	93	1220
3	61	42	48	e72	244	247	1350	3080	5290	216	102	618
4	66	46	48	e68	290	355	2820	2560	4370	196	76	317
5	57	69	46	e62	334	574	3550	2170	3090	183	73	203
6	49	97	44	e70	e300	585	3760	1890	2110	168	71	106
7	43	74	44	e80	e250	518	3810	1670	1650	154	69	91
8	43	55	42	e95	e200	367	3890	1470	1370	136	81	124
9	43	54	41	240	e150	522	4010	1230	1170	122	91	890
10	42	88	41	418	e130	953	3750	1870	1140	115	87	1430
11	41	106	36	417	e100	879	3220	1460	925	120	70	1170
12	39	147	e33	349	e76	956	2820	1290	976	127	69	872
13	39	99	e30	487	e80	1100	2480	1270	1050	109	68	924
14	37	130	e35	439	e86	1130	2120	1170	914	103	71	778
15	39	95	e31	407	e90	1200	1770	1070	819	99	66	811
16	45	132	e29	422	e88	1070	1650	876	733	96	64	801
17	51	271	e26	175	e82	1010	1440	888	562	111	64	692
18	59	339	e25	125	e80	837	1430	912	595	105	63	587
19	67	280	e30	162	e76	727	1240	901	693	91	62	562
20	82	387	e35	e110	e74	675	1130	913	576	105	64	482
21	61	481	e40	e100	e70	812	1080	1200	601	213	90	238
22	53	564	132	e110	e85	1010	1050	1470	405	171	93	144
23	56	328	299	e120	e120	1070	1030	2030	370	227	106	112
24	55	274	329	e130	e170	1210	1750	1980	432	156	132	99
25	75	225	164	e150	e155	1190	1990	1940	331	105	83	90
26	63	197	152	e170	e140	1070	1670	3730	313	100	70	111
27	54	104	e120	e190	e130	840	1470	4670	340	150	64	317
28	49	71	e100	e210	e150	634	2210	5340	516	91	74	155
29	47	61	e90	e220	---	758	3020	5900	585	85	111	105
30	48	55	e100	319	---	678	3920	5960	381	97	138	93
31	49	---	e95	198	---	621	---	5950	---	91	122	---
TOTAL	1628	4960	2385	6283	4074	24036	66697	75050	44197	4347	2577	14714
MEAN	52.5	165	76.9	203	145	775	2223	2421	1473	140	83.1	490
MAX	82	564	329	487	334	1210	4010	5960	6030	274	138	1430
MIN	37	42	25	62	70	170	607	876	313	85	62	90
CFSM	.02	.06	.03	.08	.06	.30	.85	.92	.56	.05	.03	.19
IN.	.02	.07	.03	.09	.06	.34	.95	1.07	.63	.06	.04	.21

CAL YR 1988 TOTAL 346203 MEAN 946 MAX 7000 MIN 25 CFSM .36 IN. 4.92
WTR YR 1989 TOTAL 250948 MEAN 688 MAX 6030 MIN 25 CFSM .26 IN. 3.57

e Estimated

05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L) (00310)
NOV											
03...	1300	17002	17002	43	1660	7.40	10.0	--	11.6	41	--
DEC											
01...	1300	17002	17002	40	1610	7.50	2.0	5.9	10.8	31	5.0
JAN											
19...	1300	17002	17002	121	867	8.60	3.0	6.5	14.7	27	--
FEB											
22...	1400	17002	17002	85	1540	8.40	0.0	3.9	13.8	22	--
MAR											
21...	1200	81700	80020	804	755	7.70	6.0	--	11.3	--	--
APR											
13...	1315	17002	17002	2460	637	7.60	10.0	13	9.8	14	--
MAY											
17...	1300	17002	17002	927	784	8.00	18.0	16	9.5	18	--
22...	1100	81700	80020	1450	675	8.10	18.5	--	8.5	--	--
JUN											
22...	1300	17002	17002	392	791	7.70	26.0	2.0	8.0	16	--
AUG											
03...	1400	17002	17002	93	1520	8.70	29.0	15	13.8	44	--
SEP											
19...	1300	17002	17002	565	786	8.10	21.5	3.5	8.9	20	--

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
NOV											
03...	K45	270	56	60	60	28	28	250	250	12	12
DEC											
01...	>2000	270	32	62	61	29	28	250	240	12	12
JAN											
19...	K100	270	73	59	59	31	30	72	73	2.7	2.6
FEB											
22...	K10	300	80	68	66	33	32	220	220	9.5	9.7
MAR											
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	270	270	130	65	63	29	28	21	21	2.0	1.9
MAY											
17...	K100	310	130	73	72	32	32	38	39	2.6	2.2
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
22...	K300	320	120	77	75	33	32	42	41	3.0	2.5
AUG											
03...	K550	320	110	72	72	33	33	220	220	8.8	8.4
SEP											
19...	1000	280	86	61	59	33	32	64	64	4.2	3.6

05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)
NOV											
03...	210	200	280	0.5	957	4	2	1.60	--	0.310	0.002
DEC											
01...	236	180	290	0.5	960	13	4	1.30	--	4.00	0.013
JAN											
19...	198	98	99	0.3	481	34	11	2.00	--	0.270	0.012
FEB											
22...	217	180	260	0.5	894	10	3	4.10	--	0.920	0.020
MAR											
21...	--	--	--	--	--	--	--	--	5.90	--	--
APR											
13...	143	62	46	0.2	308	90	9	11.0	--	<0.100	<0.001
MAY											
17...	183	71	72	0.3	398	63	9	12.0	--	<0.100	<0.004
22...	--	--	--	--	--	--	--	--	12.0	--	--
JUN											
22...	200	76	68	0.3	415	46	7	8.90	--	<0.100	<0.003
AUG											
03...	206	180	420	0.5	1060	126	41	0.440	--	<0.100	<0.029
SEP											
19...	194	85	97	0.4	458	90	13	2.50	--	<0.100	<0.006

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)
NOV											
03...	1.7	2.0	3.6	2.30	2.10	350	<50	4	40	33	<0.5
DEC											
01...	1.0	5.0	6.3	2.43	2.10	810	60	3	60	44	<0.5
JAN											
19...	1.6	1.9	3.9	0.500	0.310	380	<50	2	50	42	<0.5
FEB											
22...	1.3	2.2	6.3	1.20	0.980	240	70	2	50	38	<0.5
MAR											
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	0.50	11	0.280	0.140	1500	70	1	80	61	<0.5
MAY											
17...	--	1.3	13	0.520	0.400	1000	120	1	80	70	<0.5
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
22...	--	2.0	11	0.260	0.180	2000	200	1	100	77	<1.0
AUG											
03...	--	2.0	2.4	0.920	0.700	810	70	5	80	73	<0.5
SEP											
19...	--	0.50	3.0	0.580	0.470	1900	<50	5	90	65	<0.5

05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)
NOV 03...	<0.5	600	--	<3	<3	<5	<5	<5	<5	<5	<5
DEC 01...	<0.5	230	220	<3	<3	5	<5	<5	<5	<5	<5
JAN 19...	<0.5	140	--	<3	<3	<5	<5	<5	<5	<5	<5
FEB 22...	<0.5	190	--	<3	<3	6	<5	<5	<5	<5	<5
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 13...	<0.5	80	80	<3	<3	<5	<5	<5	<5	<5	<5
MAY 17...	<0.5	100	--	<3	<3	6	<5	<5	<5	<5	<5
22...	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	<1	250	--	<3	<3	7	6	<5	<5	<5	<5
AUG 03...	<0.5	870	860	<3	<3	6	<5	<5	<5	<5	<5
SEP 19...	<0.5	350	340	<3	<3	6	<5	<5	<5	9	<5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)
NOV 03...	940	280	<5	<5	530	500	<0.05	8	9	<3
DEC 01...	1400	89	<5	<5	550	520	<0.05	6	9	<3
JAN 19...	680	<50	<5	<5	180	110	<0.05	<5	<5	<3
FEB 22...	650	86	<5	<5	240	180	<0.05	8	7	<3
MAR 21...	--	--	--	--	--	--	--	--	--	--
APR 13...	2100	<50	<5	<5	110	24	<0.05	<5	<5	<3
MAY 17...	1400	<50	<5	<5	140	32	<0.05	7	5	<3
22...	--	--	--	--	--	--	--	--	--	--
JUN 22...	2300	<50	<5	<5	130	58	<0.05	9	<5	<3
AUG 03...	1100	<50	<5	<5	480	350	<0.05	10	6	<3
SEP 19...	2200	55	<5	<5	160	20	<0.05	8	5	<3

05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
NOV										
03...	<3.0	140	140	<5	<5	<50	<50	<0.005	<5	1
DEC										
01...	<3.0	140	140	<5	<5	<50	<50	<0.005	5	1
JAN										
19...	<3.0	140	140	<5	<5	<50	<50	<0.005	<5	1
FEB										
22...	<3.0	150	150	<5	<5	<50	<50	<0.005	<5	1
MAR										
21...	--	--	--	--	--	--	--	--	--	--
APR										
13...	<3.0	140	140	<5	<5	<50	<50	<0.005	<5	1
MAY										
17...	<3.0	150	150	<5	<5	<50	<50	<0.005	<0	1
22...	--	--	--	--	--	--	--	--	--	--
JUN										
22...	<3.0	150	150	8	6	<50	<50	0.005	<5	<1
AUG										
03...	<3.0	170	170	9	8	<100	<100	<0.005	--	--
SEP										
19...	<3.0	150	140	6	<5	<50	<50	<0.005	<5	--

05577500 SPRING CREEK AT SPRINGFIELD, IL

LOCATION.--Lat 39°48'57", long 89°41'57", in NW1/4NE1/4 sec.30, T.16 N., R.5 W., Sangamon County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highway 125 in Springfield, 0.8 mi downstream from Chicago and North Western Railroad bridge, 1.9 mi west of intersection of Jefferson Street and MacArthur Boulevard, and at mile 8.2.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--January to September 1948, December 1948 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 524.65 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 22, 1948, and Mar. 24, 1981, to Mar. 30, 1983, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--40 years (water years 1950-89), 65.3 ft^3/s, 8.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,080 ft^3/s, Dec. 3, 1982, gage height, 14.44 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	1715	*602	*7.72				

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.4	.02	1.0	5.2	5.0	e3.0	11	17	45	2.4	.24	178
2	e.80	.01	.81	4.4	5.5	e5.0	50	14	39	1.8	.26	22
3	e.30	.01	.72	5.5	6.9	e8.0	68	12	55	1.7	e.17	4.5
4	e.10	2.1	.56	6.0	4.6	e15	66	15	41	1.1	e.07	.97
5	e.07	2.1	.46	21	4.0	27	51	14	32	.71	e.03	.16
6	e.05	.34	.31	e15	e3.3	36	39	11	28	.34	e.01	.03
7	e.04	.09	.19	e10	e2.7	19	33	10	25	.07	.00	.01
8	e.03	.04	.07	e8.0	e2.3	16	58	9.1	23	.05	.00	42
9	e.02	12	.04	e7.6	e2.1	17	39	42	21	.02	.00	30
10	e.01	34	.02	e6.0	e2.0	24	31	31	19	.01	.00	4.9
11	.00	5.2	.00	e5.3	e2.5	37	28	19	17	.00	.00	2.3
12	.00	38	.00	e5.0	e3.0	37	26	13	18	3.0	.00	.82
13	.00	8.0	.00	e4.5	e5.0	30	23	11	24	1.8	.00	14
14	.00	2.1	.00	e4.0	e4.6	24	21	9.4	17	.04	.00	15
15	.00	2.8	.00	e3.6	e4.3	19	30	8.5	13	.01	.00	2.9
16	e.01	19	.00	e3.2	e4.0	16	21	7.7	12	.00	.00	.89
17	e1.5	2.6	.00	e3.0	e3.8	21	19	7.0	11	.00	.00	.41
18	e.50	1.3	.00	e2.8	e3.6	19	23	6.3	9.8	.00	.00	.18
19	e.11	4.2	.00	e2.6	e3.4	16	19	7.6	9.1	.00	.00	.07
20	.06	73	.00	e2.4	e3.3	44	17	7.4	8.3	13	.00	.03
21	.04	8.2	.00	e2.3	15	30	16	8.3	8.0	36	.00	.02
22	.04	7.1	172	e2.2	e3.1	25	15	12	7.0	8.7	.69	.02
23	13	3.7	79	e2.1	e3.0	22	22	9.0	6.2	5.4	.31	.01
24	2.0	2.5	31	e2.0	e3.0	19	15	9.9	4.7	3.0	.05	.01
25	.20	2.6	13	5.5	e4.0	17	14	106	4.0	.50	.04	.01
26	.08	24	16	13	e8.0	16	13	505	3.4	1.2	.03	.01
27	.05	4.6	26	5.1	e5.0	16	24	205	6.0	3.3	.00	.01
28	.04	2.2	14	4.0	e3.5	15	84	80	3.5	.13	21	.01
29	.03	1.6	11	6.1	---	13	43	84	2.9	8.6	6.7	.01
30	.03	1.3	8.3	5.1	---	13	24	71	3.4	9.3	1.0	.01
31	.02	---	6.5	5.3	---	15	---	55	---	1.1	4.3	---
TOTAL	21.53	264.71	380.98	177.8	120.5	634.0	943	1417.2	516.3	103.28	34.90	319.29
MEAN	.69	8.82	12.3	5.74	4.30	20.5	31.4	45.7	17.2	3.33	1.13	10.6
MAX	13	73	172	21	15	44	84	505	55	36	21	178
MIN	.00	.01	.00	2.0	2.0	3.0	11	6.3	2.9	.00	.00	.01
CFSM	.01	.08	.11	.05	.04	.19	.29	.43	.16	.03	.01	.10
IN.	.01	.09	.13	.06	.04	.22	.33	.49	.18	.04	.01	.11

CAL YR 1988 TOTAL 14507.52 MEAN 39.6 MAX 450 MIN .00 CFSM .37 IN. 5.04
WTR YR 1989 TOTAL 4933.49 MEAN 13.5 MAX 505 MIN .00 CFSM .13 IN. 1.72

e Estimated

05577505 SPRING CREEK AT BURNS LANE BRIDGE AT SPRINGFIELD, IL

LOCATION.--Lat 39°49'16", long 89°41'15", in SW1/4 sec.20, T.16 N., R.5 W., Sangamon County, Hydrologic Unit 07130008, at bridge on Burns Lane at northwest side of Springfield, 1.6 mi downstream from Jacksonville Branch, 5.8 mi upstream from Spring Creek tributary, and at mile 6.7.

DRAINAGE AREA.--109 mi^2.

PERIOD OF RECORD.--Water years 1979 to current year.

REMARKS.--Water-discharge records for Spring Creek at Springfield (station 05577500) were used to estimate discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV 07...	1400	17002	17002	0.08	415	7.10	7.0	--	1.3	55	K120
DEC 06...	1430	17002	17002	0.31	436	6.00	4.5	24	5.0	23	840
JAN 19...	1400	17002	17002	2.6	867	7.10	3.0	3.7	13.5	13	K10
FEB 27...	1430	17002	17002	5.0	1340	7.20	0.5	2.6	16.8	15	240
MAR 29...	1400	17002	17002	13	763	7.40	15.5	11	7.3	20	260
MAY 09...	1400	17002	17002	38	410	7.50	13.0	86	8.3	38	9600
JUN 23...	1400	17002	17002	5.6	706	7.80	26.5	8.3	6.7	18	K700
SEP 21...	0900	17002	17002	0.02	446	6.70	17.5	5.1	3.2	22	K150

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
NOV 07...	200	200	53	52	16	16	14	15	3.5	3.4	35
DEC 06...	200	200	51	52	18	18	14	14	2.7	2.6	41
JAN 19...	300	300	70	69	30	30	56	56	2.5	2.4	85
FEB 27...	340	340	78	78	36	36	150	150	3.7	3.7	92
MAR 29...	320	320	71	70	36	35	32	32	2.4	2.5	91
MAY 09...	170	170	43	40	19	18	16	16	3.8	2.5	37
JUN 23...	360	360	81	81	39	39	12	12	2.0	1.7	53
SEP 21...	200	200	49	49	18	19	16	17	2.5	2.5	37

05577505 SPRING CREEK AT BURNS LANE BRIDGE AT SPRINGFIELD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV											
07...	25	150	32	11	<0.100	<0.100	<0.001	0.650	0.330	590	<50
DEC											
06...	--	--	23	6	0.200	0.360	<0.001	0.264	0.060	830	<50
JAN											
19...	110	349	6	2	2.70	<0.100	<0.001	0.180	0.090	210	<50
FEB											
27...	260	628	3	2	0.670	<0.100	<0.001	0.050	<0.010	150	60
MAR											
29...	71	302	50	7	1.50	0.200	0.001	0.130	0.040	1000	110
MAY											
09...	31	145	188	26	1.50	0.360	0.003	0.316	0.110	6300	90
JUN											
23...	34	221	40	6	7.30	<0.100	<0.004	0.150	0.070	1700	210
SEP											
21...	30	156	25	5	0.180	0.650	0.001	0.208	0.100	660	<50

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
NOV											
07...	70	56	<0.5	<0.5	70	70	<3	<3	<5	<5	<5
DEC											
06...	60	48	<0.5	<0.5	60	60	<3	<3	<5	<5	<5
JAN											
19...	80	76	<0.5	<0.5	80	80	<3	<3	<5	<5	<5
FEB											
27...	70	68	<0.5	<0.5	80	80	<3	<3	<5	<5	<5
MAR											
29...	100	89	<0.5	<0.5	70	70	<3	<3	8	<5	<5
MAY											
09...	100	47	<0.5	<0.5	<50	<50	<3	<3	11	<5	<5
JUN											
23...	100	100	<0.5	<0.5	<50	<50	<3	<3	9	8	<5
SEP											
21...	90	80	<0.5	<0.5	60	--	<3	<3	<5	<5	<5

05577505 SPRING CREEK AT BURNS LANE BRIDGE AT SPRINGFIELD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
NOV 07...	<5	<5	<5	3200	1600	9	<5	1500	1500	<5
DEC 06...	<5	<5	<5	2000	<50	<5	<5	540	530	<5
JAN 19...	<5	<5	<5	520	<50	<5	<5	250	240	<5
FEB 27...	<5	<5	<5	370	<50	<5	<5	210	210	6
MAR 29...	<5	<5	<5	1400	<50	6	<5	360	310	6
MAY 09...	<5	12	<5	8200	<50	14	<5	390	150	<5
JUN 23...	<5	5	<5	1900	<50	5	<5	180	100	14
SEP 21...	<5	<5	<5	1400	<50	<5	<5	860	820	<5

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV 07...	<5	<3	<3.0	110	110	<5	<5	<50	<50	6
DEC 06...	<5	<3	<3.0	110	110	<5	<5	<50	<50	2
JAN 19...	<5	<3	<3.0	170	170	<5	<5	<50	<50	1
FEB 27...	<5	<3	<3.0	190	190	<5	<5	<50	<50	1
MAR 29...	<5	<3	<3.0	190	190	5	<5	<50	<50	<1
MAY 09...	<5	<3	<3.0	100	91	14	<5	<100	<100	8
JUN 23...	9	<3	<3.0	180	180	9	5	<50	<50	--
SEP 21...	<5	<3	<3.0	120	120	<5	<5	<50	<50	--

05578000 SANGAMON RIVER AT PETERSBURG, IL

LOCATION.--Lat 40°00'37", long 89°50'42", in SW1/4NW1/4 sec.13, T.18 N., R.7 W., Menard County, Hydrologic Unit 07130008, at bridge on State Highway 23 at east edge of Petersburg, 2.8 mi upstream from Indian Creek, 2.9 mi downstream from Rocky Branch, and at mile 45.9.

DRAINAGE AREA.--3,063 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV 07...	0900	17002	17002	127	1230	7.90	7.0	--	11.2	29	K25
DEC 20...	0830	17002	17002	121	1680	7.50	2.0	9.9	13.2	26	K700
JAN 25...	0830	17002	17002	213	1540	8.90	5.0	11	16.1	38	K110
MAR 01...	0900	17002	17002	263	1340	8.30	1.0	2.5	15.1	20	K2
APR 04...	0900	17002	17002	1950	778	7.80	10.0	18	10.2	26	1100
MAY 22...	0900	17002	17002	1450	747	7.90	19.5	4.9	7.4	21	K450
JUN 22...	0830	17002	17002	793	815	7.90	25.0	11	7.6	20	K350
JUL 31...	0900	17002	17002	176	1030	8.50	26.5	15	7.6	29	520
SEP 11...	0900	17002	17002	1480	1110	7.40	21.0	20	6.4	29	2600

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
NOV 07...	240	65	54	54	25	26	160	160	9.5	9.6	177
DEC 20...	300	81	67	66	32	32	250	240	12	12	216
JAN 25...	290	61	63	62	33	32	200	200	9.6	9.2	226
MAR 01...	300	99	69	67	33	32	180	170	8.0	7.9	201
APR 04...	280	110	67	65	30	29	51	51	3.9	3.5	172
MAY 22...	280	97	70	65	30	28	34	32	2.2	1.3	181
JUN 22...	320	130	75	74	32	32	49	50	3.8	2.4	190
JUL 31...	260	77	61	59	28	27	120	120	9.8	8.6	182
SEP 11...	210	40	49	47	23	22	130	130	9.4	7.6	168

05578000 SANGAMON RIVER AT PETERSBURG, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)
NOV 07...	160	190	703	15	4	3.20	<0.100	<0.001	2.50	2.20	420
DEC 20...	210	300	1000	--	--	3.30	2.80	0.009	3.33	3.10	160
JAN 25...	180	45	666	42	12	5.00	<0.100	<0.009	1.60	1.30	490
MAR 01...	140	220	762	6	2	4.60	0.450	0.008	1.00	0.920	160
APR 04...	94	80	426	181	17	5.10	0.460	0.006	0.693	0.370	2800
MAY 22...	68	65	368	149	20	10.0	<0.100	<0.003	0.410	0.250	2800
JUN 22...	76	71	420	94	10	9.10	<0.100	<0.005	0.680	0.500	2200
JUL 31...	110	140	575	96	21	0.880	<0.100	<0.018	0.990	0.770	1400
SEP 11...	100	260	673	206	16	2.90	0.210	0.002	1.60	1.30	3400

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
NOV 07...	<50	40	31	<0.5	<0.5	410	41	<3	<3	<5	<5
DEC 20...	<50	50	34	<0.5	<0.5	430	430	<3	<3	<5	<5
JAN 25...	80	50	41	<0.5	<0.5	230	230	<3	<3	6	<5
MAR 01...	80	40	36	<0.5	<0.5	200	190	<3	<3	<5	<5
APR 04...	190	100	57	<0.5	<0.5	240	240	<3	<3	8	<5
MAY 22...	180	100	72	<0.5	<0.5	100	100	<3	<3	150	<5
JUN 22...	200	100	77	<1.0	<1	170	150	<3	<3	<5	<5
JUL 31...	100	80	62	<1.0	<0.5	510	480	<3	<3	<5	<5
SEP 11...	60	100	74	<0.5	<0.5	150	140	<3	<3	7	<5

05578000 SANGAMON RIVER AT PETERSBURG, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
NOV											
07...	<5	<5	<5	<5	790	180	<5	<5	510	480	<0.05
DEC											
20...	<5	<5	<5	<5	720	120	<5	<5	560	540	<0.05
JAN											
25...	<5	<5	<5	<5	710	<50	<5	<5	200	130	<0.05
MAR											
01...	<5	<5	<5	<5	410	55	<5	<5	170	150	<0.05
APR											
04...	<5	<5	6	<5	4100	<50	7	<5	320	53	<0.05
MAY											
22...	<5	<5	<5	<5	4100	<50	44	<5	230	<50	<0.05
JUN											
22...	<5	<5	<5	<5	2600	<50	<5	<5	150	<5	<0.05
JUL											
31...	<5	<5	<5	<5	1800	<50	<5	<5	400	37	<0.05
SEP											
11...	<5	<5	6	<5	4800	<50	6	<5	320	17	<0.05

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
NOV											
07...	8	7	<3	<3.0	110	120	7	<5	<50	<50	1
DEC											
20...	10	10	<3	<3.0	150	150	<5	<5	<50	<50	<1
JAN											
25...	10	10	<5	<3.0	150	140	6	<5	<50	<50	<1
MAR											
01...	6	7	<3	<3.0	160	150	<5	<5	<50	<50	3
APR											
04...	8	5	<3	<3.0	150	150	6	<5	<50	<50	--
MAY											
22...	70	<5	<3	<5.0	160	150	<5	<5	<50	<50	<1
JUN											
22...	8	<5	<3	<3.0	150	150	<5	<5	<50	<50	--
JUL											
31...	<5	<5	<3	<3.0	140	130	<5	<5	<100	<100	--
SEP											
11...	10	<5	<3	<3.0	110	110	12	<5	<50	<50	--

05578500 SALT CREEK NEAR ROWELL, IL

LOCATION.--Lat 40°06'54", long 89°02'57", in NE1/4SE1/4 sec.11, T.19 N., R.1 E., De Witt County, Hydrologic Unit 07130009, on right bank at downstream side of highway bridge, 0.5 mi upstream from State Highway 54, 0.8 mi upstream from Illinois Central Gulf Railroad bridge and Ten Mile Creek, 3.2 mi northwest of Rowell, and at mile 65.3.

DRAINAGE AREA.--335 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Water-discharge records good except those for estimated daily dischares, which are poor. Beginning Oct. 12, 1977, flow partially regulated by Clinton Reservoir, 11 mi upstream from gage.

AVERAGE DISCHARGE.--35 years (water years 1943-77), 237 ft^3/s, 9.61 in/yr, prior to construction of Clinton Reservoir. 12 years, 243 ft^3/s, since construction of Clinton Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft^3/s, May 16, 1968, gage height, 29.21 ft; minimum, 0.7 ft^3/s, Oct. 4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft^3/s, May 28, gage height, 18.62 ft; minimum daily, 5.0 ft^3/s, Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	6.9	9.1	12	27	e14	20	504	819	68	15	465
2	6.8	5.6	8.2	12	e25	e15	55	442	669	59	13	238
3	5.8	5.0	7.8	12	e22	60	151	366	559	59	14	163
4	5.3	7.2	7.0	11	e20	52	185	340	484	52	13	127
5	5.4	8.9	7.5	12	e18	69	216	306	413	43	12	101
6	5.6	6.3	7.6	16	e16	38	252	266	351	37	14	65
7	5.6	5.5	8.0	16	e15	28	264	236	303	34	12	77
8	6.9	6.4	8.4	16	e14	23	308	216	264	31	12	135
9	6.9	7.6	8.5	17	e13	24	322	247	234	29	12	290
10	6.1	19	8.6	14	e13	29	310	243	204	24	12	244
11	6.0	e10	8.0	13	e14	32	282	229	188	21	12	238
12	5.4	7.8	8.5	13	e15	29	268	208	176	19	14	218
13	8.6	8.6	8.9	12	e14	29	261	193	176	19	12	240
14	7.6	e9.0	9.5	12	e13	27	251	184	168	19	12	304
15	6.0	e15	9.0	12	e13	29	241	158	148	18	13	308
16	6.3	27	7.7	11	e12	23	231	158	132	18	13	281
17	7.1	5.1	8.3	11	e12	21	224	150	109	17	13	253
18	20	e10	8.4	11	e13	26	205	141	95	16	12	228
19	9.6	e5.1	8.5	11	e13	21	199	158	93	17	12	203
20	7.4	27	8.5	11	e14	20	184	190	95	52	12	175
21	7.6	17	8.5	11	e13	30	171	223	93	37	12	151
22	8.6	5.7	43	10	e13	26	251	247	81	31	18	132
23	14	e5.8	85	11	e12	23	307	260	101	26	24	120
24	15	6.0	21	11	e13	22	245	242	129	27	20	94
25	12	6.2	15	11	e13	22	247	296	93	24	14	76
26	12	9.0	13	14	e12	19	450	1190	79	22	13	64
27	9.8	11	16	8.5	e13	25	589	1510	105	20	13	59
28	10	10	19	11	e13	25	532	2110	109	16	19	43
29	10	9.6	15	15	---	26	459	1890	101	19	203	34
30	8.0	9.7	14	18	---	30	393	1520	83	17	39	34
31	6.5	---	13	22	---	23	---	1080	---	15	23	---
TOTAL	257.5	293.0	428.5	397.5	418	880	8073	15513	6654	916	652	5180
MEAN	8.31	9.77	13.8	12.8	14.9	28.4	269	500	222	29.5	21.0	173
MAX	20	27	85	22	27	69	589	2110	819	68	203	465
MIN	5.3	5.0	7.0	8.5	12	14	20	141	79	15	12	34

CAL YR 1988 TOTAL 35175.0 MEAN 96.1 MAX 1010 MIN 3.7
WTR YR 1989 TOTAL 39662.5 MEAN 109 MAX 2110 MIN 5.0

e Estimated

05578500 SALT CREEK NEAR ROWELL, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
31...	1200	17002	17002	7.1	776	8.10	6.0	8.8	11.3	18	K25	300
DEC												
06...	1200	17002	17002	8.5	732	7.40	4.0	5.6	11.9	7	K35	300
JAN												
24...	1100	17002	17002	12	705	8.20	3.0	5.0	16.3	14	K10	280
FEB												
27...	1200	17002	17002	13	765	8.10	0.0	2.3	18.8	17	<2	310
APR												
12...	1200	17002	17002	268	541	8.20	8.5	5.6	12.1	16	140	260
MAY												
15...	1200	17002	17002	167	562	8.10	14.5	2.6	8.6	16	100	270
JUN												
21...	1100	17002	17002	95	553	7.90	23.5	0.60	7.8	17	K60	260
AUG												
02...	1200	17002	17002	13	673	7.90	23.5	6.8	8.0	14	590	290
SEP												
06...	1200	17002	17002	83	519	7.90	23.5	16	7.1	18	K550	250

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT												
31...	300	54	54	39	39	61	62	3.7	3.7	2	1	2.10
DEC												
06...	300	56	56	39	39	46	46	2.9	2.9	5	2	2.20
JAN												
24...	280	54	52	37	36	40	38	2.2	2.1	7	2	1.60
FEB												
27...	310	60	59	41	40	51	50	2.7	2.7	4	2	1.80
APR												
12...	260	45	44	37	36	13	13	1.8	1.6	48	6	1.20
MAY												
15...	270	50	49	36	36	14	14	1.8	1.6	47	4	2.10
JUN												
21...	260	52	51	34	33	14	14	1.7	1.8	28	4	3.60
AUG												
02...	290	57	56	38	37	34	34	2.5	2.2	13	2	2.40
SEP												
06...	250	44	44	34	34	15	15	2.3	1.2	178	19	1.30

05578500 SALT CREEK NEAR ROWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT 31...	<0.100	<0.002	0.900	0.890	100	<50	80	83	<0.5	<0.5	200	200
DEC 06...	<0.100	<0.001	0.520	0.450	190	50	80	71	<0.5	<0.5	130	130
JAN 24...	<0.100	<0.002	0.470	0.410	110	<50	90	76	<0.5	<0.5	120	120
FEB 27...	<0.100	<0.001	0.450	0.390	110	70	80	78	<0.5	<0.5	150	150
APR 12...	<0.100	<0.003	0.120	0.030	720	<50	80	62	<0.5	<0.5	<50	<50
MAY 15...	<0.100	<0.003	0.100	0.050	820	100	80	72	<0.5	<0.5	<50	<50
JUN 21...	<0.100	<0.004	0.170	0.060	910	230	90	74	<0.5	<0.5	<50	<50
AUG 02...	<0.100	<0.004	0.360	0.200	700	<50	100	90	<0.5	<0.5	110	110
SEP 06...	<0.100	<0.004	0.160	0.020	1100	70	90	76	<0.5	<0.5	<50	<50

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 31...	<3	<3	<5	<5	<5	<5	8	7	230	73	<5	<5
DEC 06...	<3	<3	<5	<5	<5	<5	<5	<5	400	<50	5	<5
JAN 24...	<3	<3	<5	5	<5	<5	11	8	590	97	<5	<5
FEB 27...	<3	<3	6	6	<5	<5	6	6	470	96	<5	<5
APR 12...	<3	<3	6	<5	<5	<5	<5	<5	1100	<50	<5	<5
MAY 15...	<3	<3	6	<5	<5	<5	<5	<5	1000	<50	<5	<5
JUN 21...	<3	<3	7	<5	<5	<5	<5	6	980	<50	<5	<5
AUG 02...	<3	<3	5	<5	<5	<5	8	5	950	<50	<5	<5
SEP 06...	<3	<3	6	<5	<5	<5	<5	<5	1700	<50	<5	<5

05578500 SALT CREEK NEAR ROWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
OCT												
31...	53	46	6	7	<3	<3.0	190	190	<5	<5	<50	<50
DEC												
06...	120	110	11	11	<3	<3.0	180	180	<5	<5	<100	<100
JAN												
24...	210	190	6	7	<3	<3.0	180	170	<5	<5	<50	<50
FEB												
27...	170	160	12	13	<3	<3.0	190	190	<5	<5	<50	<50
APR												
12...	160	21	<5	<5	<3	<3.0	120	120	<5	<5	<50	<50
MAY												
15...	100	23	9	6	<3	<3.0	130	130	<5	<5	<50	<50
JUN												
21...	130	<5	7	6	<3	<3.0	120	110	6	<5	<50	<50
AUG												
02...	140	74	<5	<5	<3	<3.0	170	160	5	<5	240	<50
SEP												
06...	150	14	<10	<10	<3	<3.0	120	120	<5	<5	<100	<100

05579500 LAKE FORK NEAR CORNLAND, IL

LOCATION.--Lat 39°57'00", long 89°23'10", IN SW1/4 sec.1, T.17 N., R.3 W., Logan County, Hydrologic Unit 07130009, near center of span on upstream side of bridge on State Highway 54, 100 ft upstream from Illinois Central Railroad bridge, 2.0 mi northeast of Cornland, 8 mi downstream from Jones Fork, and at mile 12.9.

DRAINAGE AREA.--214 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.
REVISED RECORDS.--WDR IL-75-1: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 555.06 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1973, nonrecording gage at same site and datum.
REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.
AVERAGE DISCHARGE.--41 years, 153 ft^3/s, 9.71 in/yr.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,930 ft^3/s, Apr. 12, 1979, gage height, 23.11 ft; minimum, 0.30 ft^3/s, Sept. 16, 1988.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 23.4 ft, from floodmarks, discharge, 29,000 ft^3/s, by contracted-opening measurement of peak flow.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	Unknown	1,450	14.35	Sept. 9	0145	*1,620	*14.87

Minimum discharge, 1.5 ft^3/s, Oct. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	4.2	3.2	e17	e9.4	20	55	354	e330	37	e16	582
2	6.4	4.3	3.0	e16	e8.2	16	62	304	e270	e35	14	542
3	5.8	4.3	3.1	e16	e7.2	30	205	261	e230	e90	12	149
4	6.0	4.8	2.9	e15	e6.4	93	319	239	e200	e76	11	78
5	5.7	5.5	3.1	e15	e5.6	111	278	228	e170	e64	11	55
6	5.0	5.8	2.7	e15	e5.2	83	226	197	e150	e54	10	48
7	4.7	5.2	2.8	e20	e4.7	e76	195	174	e130	e47	9.1	40
8	4.8	5.0	2.7	29	e4.3	e70	210	163	e120	e40	8.6	500
9	5.3	5.9	2.6	56	e4.1	66	234	326	e110	e35	8.3	1460
10	5.8	14	e2.5	38	e4.0	98	207	295	e100	e30	8.0	810
11	6.0	6.2	e2.4	31	e5.0	124	185	216	e100	e26	7.6	416
12	6.1	14	e2.3	27	e6.5	110	173	187	e110	e23	7.3	295
13	6.0	8.5	e2.2	23	e8.0	95	155	e170	e150	e20	7.2	290
14	6.8	6.0	e2.5	30	e7.4	90	146	e150	e130	e19	8.0	398
15	7.7	7.4	3.3	22	e7.0	84	143	e140	e110	e18	6.5	466
16	8.7	28	3.4	20	e6.6	70	131	e125	e100	e17	6.4	373
17	14	35	3.1	20	e6.4	67	124	e110	e90	e16	6.4	287
18	9.8	6.9	2.9	20	e6.2	65	115	e100	e80	e15	6.2	236
19	3.7	4.1	2.7	18	e6.0	58	107	e130	e72	e50	5.8	185
20	2.0	56	3.1	17	e10	64	99	e200	e68	e300	5.9	162
21	2.4	53	3.2	16	e9.0	71	99	e150	e64	e200	5.7	147
22	2.4	16	55	16	e8.2	70	97	e120	e60	e150	7.7	141
23	2.7	6.2	78	17	e7.6	68	196	e142	e56	e110	8.9	127
24	3.5	5.2	47	17	e7.4	68	485	e100	e70	e80	7.0	109
25	3.8	4.8	27	16	e7.0	65	365	e200	e54	e60	6.3	105
26	3.8	5.0	22	17	e7.0	62	288	e1400	e50	e50	5.7	98
27	3.7	3.8	21	17	e9.0	60	282	e1000	e150	e38	5.7	66
28	3.9	3.9	e20	20	e14	61	630	e800	e60	e30	15	59
29	3.9	3.3	e19	16	---	62	615	e640	41	e25	54	58
30	4.1	3.3	e18	e13	---	60	441	e500	38	e20	74	58
31	4.0	---	e17	e11	---	58	---	e400	---	e18	24	---
TOTAL	166.1	335.6	383.7	641	197.4	2195	6867	9521	3463	1793	389.3	8340
MEAN	5.36	11.2	12.4	20.7	7.05	70.8	229	307	115	57.8	12.6	278
MAX	14	56	78	56	14	124	630	1400	330	300	74	1460
MIN	2.0	3.3	2.2	11	4.0	16	55	100	38	15	5.7	40
CFSM	.03	.05	.06	.10	.03	.33	1.07	1.44	.54	.27	.06	1.30
IN.	.03	.06	.07	.11	.03	.38	1.19	1.66	.60	.31	.07	1.45

CAL YR 1988 TOTAL 31434.88 MEAN 85.9 MAX 1370 MIN .77 CFSM .40 IN. 5.46
WTR YR 1989 TOTAL 34292.1 MEAN 94.0 MAX 1460 MIN 2.0 CFSM .44 IN. 5.96

e Estimated

05579500 LAKE FORK NEAR CORNLAND, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EIG 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 31...	1300	17002	17002	4.3	695	7.50	8.0	12	11.7	14	K20
DEC 06...	1300	17002	17002	3.2	760	7.50	7.0	4.3	13.6	2	K20
JAN 24...	1300	17002	17002	16	722	8.20	4.0	5.5	16.2	6	K30
FEB 27...	1300	17002	17002	9.0	720	8.00	2.0	3.7	17.5	6	K2
MAR 21...	1030	81700	80020	72	622	7.60	6.0	--	10.8	--	--
APR 12...	1300	17002	17002	172	718	8.00	10.5	6.3	11.5	6	110
MAY 15...	1300	17002	17002	130	730	7.80	13.0	5.8	9.5	8	K75
22...	1220	81700	80020	120	727	8.10	15.0	--	8.6	--	--
JUN 21...	1300	17002	17002	64	746	7.40	23.0	0.20	7.5	7	400
AUG 02...	1400	17002	17002	14	668	7.90	26.5	2.7	13.9	8	200
SEP 06...	1400	17002	17002	37	728	7.80	22.5	5.2	6.7	11	K450

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 31...	390	390	89	90	40	40	9.5	9.7	2.1	2.0
DEC 06...	410	410	99	98	39	39	16	16	1.7	1.7
JAN 24...	360	360	82	81	38	38	15	15	1	0.88
FEB 27...	380	380	91	87	42	40	16	16	1.1	0.98
MAR 21...	--	--	--	--	--	--	--	--	--	--
APR 12...	380	380	88	86	39	39	8.9	8.8	0.7	0.37
MAY 15...	380	380	92	89	40	39	7.9	7.7	0.3	0.30
22...	--	--	--	--	--	--	--	--	--	--
JUN 21...	400	400	96	93	41	40	8.6	8.5	0.3	0.30
AUG 02...	370	370	82	82	39	39	9.8	9.8	1.3	0.30
SEP 06...	400	400	96	95	39	39	9.9	10	1.4	1.2

05579500 LAKE FORK NEAR CORNLAND, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT										
31...	6	1	<0.100	--	<0.100	<0.001	0.100	0.040	210	<50
DEC										
06...	8	2	0.640	--	0.280	0.001	0.048	0.020	290	50
JAN										
24...	4	2	1.50	--	<0.100	<0.002	0.120	0.100	420	90
FEB										
27...	14	3	1.60	--	<0.100	<0.001	0.050	0.010	210	80
MAR										
21...	--	--	--	6.00	--	--	--	--	--	--
APR										
12...	67	6	12.0	--	<0.100	<0.002	0.090	0.020	1100	100
MAY										
15...	66	6	12.0	--	<0.100	<0.002	0.080	0.020	1300	130
22...	--	--	--	13.0	--	--	--	--	--	--
JUN										
21...	18	3	8.90	--	0.100	0.001	0.120	0.040	1600	220
AUG										
02...	8	2	0.430	--	<0.100	<0.005	0.200	0.060	180	<50
SEP										
06...	90	8	3.80	--	0.160	0.005	0.160	0.060	1100	70

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT										
31...	90	91	<0.5	<0.5	<50	<50	<3	<3	<5	<5
DEC										
06...	100	97	<0.5	<0.5	<50	<50	<3	<3	<5	<5
JAN										
24...	100	83	<0.5	<0.5	<50	<50	<3	<3	8	7
FEB										
27...	80	70	<0.5	<0.5	50	<50	<3	<3	6	6
MAR										
21...	--	--	--	--	--	--	--	--	--	--
APR										
12...	90	78	<0.5	<0.5	<50	<50	<3	<3	<5	<5
MAY										
15...	100	82	<0.5	<0.5	<50	<50	<3	<3	6	<5
22...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	100	95	<1.0	<1	<50	<50	<3	<3	8	6
AUG										
02...	100	100	<0.5	<0.5	<50	<50	<3	<3	6	5
SEP										
06...	100	120	<0.5	<0.5	<50	<50	<3	<3	<5	<5

05579500 LAKE FORK NEAR CORNLAND, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
31...	<5	<5	<5	<5	780	96	<5	<5	440	430
DEC										
06...	<5	<5	<5	<5	540	<50	<5	<5	590	570
JAN										
24...	<5	<5	<5	<5	2000	410	<5	<5	580	480
FEB										
27...	<5	<5	<5	<5	1000	100	<5	<5	480	420
MAR										
21...	--	--	--	--	--	--	--	--	--	--
APR										
12...	<5	<5	<5	<5	1700	<50	<5	<5	190	93
MAY										
15...	<5	<5	<5	<5	1700	<50	<5	<5	140	71
22...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	5	<5	<5	<5	2000	<50	<5	<5	180	45
AUG										
02...	<5	<5	<5	<5	420	<50	<5	<5	420	400
SEP										
06...	<5	<5	<5	<5	2100	<50	<5	<5	310	100

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
31...	<5	<5	<3	<3.0	160	170	<5	<5	170	140
DEC										
06...	5	<5	<3	<3.0	190	190	<5	<5	<50	<50
JAN										
24...	<5	<5	<3	<3.0	180	180	<5	<5	<50	<50
FEB										
27...	<5	<5	<3	<3.0	190	180	<5	<5	<50	<50
MAR										
21...	--	--	--	--	--	--	--	--	--	--
APR										
12...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
MAY										
15...	5	7	<3	<3.0	170	160	<5	<5	<50	<50
22...	--	--	--	--	--	--	--	--	--	--
JUN										
21...	10	10	<3	<3.0	170	160	7	<5	<50	<50
AUG										
02...	<5	<5	<3	<3.0	170	170	<5	<5	<100	<100
SEP										
06...	16	17	<3	<3.0	170	170	<5	<5	180	<100

ILLINOIS RIVER BASIN

05580000 KICKAPOO CREEK AT WAYNESVILLE, IL

LOCATION.--Lat 40°15'20", long 89°07'40", on line between secs.19 and 20, T.21 N., R.1 E., De Witt County, Hydrologic Unit 07130009, near center of span on downstream side of bridge, 0.5 mi downstream from Rock Creek, 0.7 mi north of Waynesville and Waynesville-McLean Road, and at mile 25.3.

DRAINAGE AREA.--227 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1175: 1948-49.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 620.24 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 8, 1970, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--41 years, 160 ft^3/s, 9.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,600 ft^3/s, Aug. 15, 1981, gage height, 16.91 ft; no flow Sept. 15, 28, 29, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	1200	*4,890	*12.08	No other peak greater than base discharge.			

Minimum daily discharge, 0.24 ft^3/s, Oct. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	1.7	3.5	24	e8.8	e10	34	201	198	39	14	e500
2	.33	1.7	e2.9	21	e7.5	e9.5	37	184	181	29	13	e400
3	.44	1.7	e2.3	18	e6.5	16	161	150	176	87	11	e300
4	.33	1.9	e1.8	17	e5.5	113	313	126	150	51	9.8	e190
5	e.32	2.0	e2.0	16	e4.8	247	216	127	137	37	8.1	e150
6	e.32	2.0	e2.1	17	e4.5	261	158	152	125	32	6.8	e100
7	e.31	2.0	e2.0	28	e4.0	302	144	152	112	28	5.5	e80
8	e.31	2.1	e1.9	56	e4.4	e150	147	151	102	26	5.1	e200
9	e.30	2.3	e1.8	116	e4.8	e60	199	136	94	23	5.0	e300
10	e.29	15	e1.7	91	e5.2	58	151	124	83	18	4.4	e250
11	e.28	28	e1.6	53	e6.0	62	122	93	77	15	4.5	e230
12	e.27	12	e1.9	36	e6.5	63	117	83	88	13	4.2	e220
13	e.24	19	e2.1	36	e7.2	54	98	79	111	12	3.6	e250
14	.37	17	e1.9	30	e8.0	52	88	71	84	11	3.2	e300
15	.45	10	e1.8	24	e8.5	51	86	65	72	9.9	3.9	e320
16	.50	7.6	e2.0	22	e8.0	43	80	61	68	9.7	e3.7	e300
17	.61	15	e2.2	17	e7.5	39	72	58	63	8.7	7.7	e270
18	.95	11	e2.3	15	e7.0	70	68	57	57	8.0	7.0	e230
19	.86	8.7	e2.1	15	e6.6	68	64	88	54	17	4.7	e210
20	.83	27	e2.0	14	e8.0	63	59	183	51	671	4.4	e180
21	.83	54	2.6	12	e10	66	55	131	48	313	4.1	e160
22	.87	21	19	14	e13	59	52	99	46	164	5.8	e140
23	1.4	13	221	11	e15	55	162	94	43	88	5.0	e130
24	1.5	10	76	11	e14	53	232	79	50	59	21	e120
25	1.5	7.6	41	11	e12	51	155	480	41	51	27	e110
26	1.9	6.9	27	12	e13	46	122	3910	36	41	11	e94
27	2.0	6.0	23	15	e14	42	139	1040	167	36	7.3	e82
28	1.9	7.1	39	14	e12	42	748	539	97	25	e15	e72
29	1.9	5.8	36	13	---	45	464	395	54	19	e190	e60
30	1.8	4.6	36	e12	---	41	278	293	43	17	e100	e50
31	1.7	---	33	e10	---	38	---	235	---	14	e60	---
TOTAL	25.88	323.7	595.5	801	232.3	2329.5	4821	9636	2708	1972.3	575.8	5998
MEAN	.83	10.8	19.2	25.8	8.30	75.1	161	311	90.3	63.6	18.6	200
MAX	2.0	54	221	116	15	302	748	3910	198	671	190	500
MIN	.24	1.7	1.6	10	4.0	9.5	34	57	36	8.0	3.2	50
CFSM	.00	.05	.08	.11	.04	.33	.71	1.37	.40	.28	.08	.88
IN.	.00	.05	.10	.13	.04	.38	.79	1.58	.44	.32	.09	.98

CAL YR 1988 TOTAL 24112.21 MEAN 65.9 MAX 2070 MIN .00 CFSM .29 IN. 3.95
WTR YR 1989 TOTAL 30018.98 MEAN 82.2 MAX 3910 MIN .24 CFSM .36 IN. 4.92

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT												
24...	0900	17002	17002	1.5	622	8.00	6.0	11	8.5	15	120	350
NOV												
17...	1000	17002	17002	18	533	7.50	4.0	13	11.0	16	290	290
JAN												
09...	0930	17002	17002	105	833	7.60	0.0	25	14.5	13	400	310
FEB												
14...	0900	17002	17002	8.0	747	8.00	0.0	1.6	14.6	8	K20	380
MAR												
13...	0900	17002	17002	54	644	8.00	5.0	2.4	13.3	9	K18	320
MAY												
08...	0900	17002	17002	151	703	7.80	10.5	1.2	10.1	6	K70	360
JUN												
01...	0900	17002	17002	221	725	7.70	20.0	7.8	7.7	11	330	340
JUL												
26...	1200	17002	17002	39	700	7.90	26.0	12	7.2	8	K550	370
AUG												
23...	0900	17002	17002	11	627	7.90	22.5	78	6.6	26	--	260

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT												
24...	350	76	75	40	40	7.5	7.5	1.6	1.6	5	1	0.130
NOV												
17...	290	66	66	30	30	11	12	3.1	3.0	11	4	0.120
JAN												
09...	310	76	73	32	31	44	44	2.9	2.8	36	5	6.50
FEB												
14...	380	86	86	41	41	19	19	1.7	1.6	4	2	2.20
MAR												
13...	--	76	--	33	33	17	--	1.4	1.9	8	1	7.00
MAY												
08...	360	83	82	38	38	9.6	9.5	0.6	0.60	22	2	11.0
JUN												
01...	340	90	82	35	32	8.3	7.6	0.9	0.44	101	10	15.0
JUL												
26...	370	84	85	38	38	13	13	0.9	1.2	34	4	5.50
AUG												
23...	260	63	58	31	28	11	11	4.1	3.0	202	26	0.350

05580000 KICKAPOO CREEK AT WAYNESVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT 24...	<0.100	<0.001	0.070	0.020	180	<50	80	77	<0.5	<0.5	<50	<50
NOV 17...	0.100	<0.001	0.080	0.040	490	140	70	66	<0.5	<0.5	<50	<50
JAN 09...	0.300	0.001	0.170	0.110	1500	50	100	84	<0.5	<0.5	<50	<50
FEB 14...	<0.100	<0.001	0.060	0.02	210	60	80	72	<0.5	<0.5	<50	<50
MAR 13...	<0.100	<0.001	0.070	0.040	320	60	30	--	<0.5	<0.5	<50	470
MAY 08...	<0.100	<0.001	0.050	0.020	680	230	80	71	<0.5	<0.5	<50	<50
JUN 01...	0.250	0.005	0.120	0.070	2000	160	100	82	<0.5	<0.5	<50	<50
JUL 26...	<0.100	<0.005	0.110	0.060	880	<50	100	98	<0.5	<0.5	<50	<50
AUG 23...	0.120	0.005	0.266	0.110	3400	90	100	63	<0.5	<0.5	<50	<50

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 24...	<3	<3	<5	<5	<5	<5	<5	<5	380	81	<5	<5
NOV 17...	<3	<3	<5	<5	<5	<5	<5	<5	640	<50	<5	<5
JAN 09...	<3	<3	6	<5	6	<5	6	<5	2000	<50	<5	<5
FEB 14...	<3	<3	8	6	<5	<5	<5	<5	490	52	<5	<5
MAR 13...	<3	<3	<5	<5	<5	<5	<5	<5	400	<50	<5	<5
MAY 08...	--	--	<5	<5	<5	<5	<5	<5	650	64	<5	<5
JUN 01...	<3	<3	<5	<5	<5	<5	<5	<5	2300	<50	<5	<5
JUL 26...	<3	6	<5	<5	<5	<5	<5	<5	1200	<50	<5	<5
AUG 23...	<3	<3	<5	<5	<5	<5	<5	<5	4700	<50	5	<5

05580000 KICKAPOO CREEK AT WAYNESVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
OCT 24...	290	190	<5	<5	<3	<3.0	140	140	<5	<5	<50	<50
NOV 17...	150	120	<5	<5	<3	<3.0	120	120	<5	<5	<50	<50
JAN 09...	130	78	6	<5	<5	<3.0	160	160	7	<5	<50	<50
FEB 14...	210	190	10	8	<3	<3.0	160	160	<5	<5	<50	<50
MAR 13...	61	43	<5	5	<3	<3.0	120	120	<5	<5	<50	<50
MAY 08...	91	57	<5	<5	<3	<3.0	140	130	<5	<5	<50	<50
JUN 01...	150	22	6	<5	<3	<3.0	150	130	<5	<5	<50	<50
JUL 26...	96	36	<5	<5	<3	<3.0	150	--	<5	<5	<50	<50
AUG 23...	360	70	17	13	<3	<3.0	110	100	6	<5	<50	<50

05580500 KICKAPOO CREEK NEAR LINCOLN, IL

LOCATION.--Lat 40°11'30", long 89°21'40", in NE1/4NW1/4 sec.18, T.20 N., R.2 W., Logan County, Hydrologic Unit 07130009, at bridge on county road, 1,000 ft upstream from Illinois Terminal electric railroad, 2.4 mi upstream from small unnamed tributary, 3.0 mi north of Lincoln, and at mile 7.4.

DRAINAGE AREA.--306 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
24...	1200	17002	17002	80	594	7.80	8.0	5.1	7.8	10	550
NOV											
17...	1300	17002	17002	29	554	7.70	6.0	3.9	11.1	17	K130
JAN											
09...	1230	17002	17002	50	764	7.90	0.0	13	14.7	8	260
FEB											
14...	1300	17002	17002	20	710	7.80	0.0	1.6	17.8	7	K10
MAR											
13...	1030	17002	17002	85	663	8.00	6.0	3.7	13.3	11	K36
MAY											
08...	1200	17002	17002	--	715	8.00	12.0	3.3	10.0	6	K85
JUN											
01...	1200	17002	17002	300	725	7.80	21.5	10	7.5	13	360
JUL											
26...	1100	17002	17002	--	634	7.80	25.5	18	6.7	18	K850
AUG											
23...	1300	17002	17002	35	606	7.90	24.0	41	5.6	15	K10000

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
24...	310	65	64	64	38	37	15	15	1.3	1.3	248
NOV											
17...	290	77	64	65	31	32	13	13	2.7	2.7	217
JAN											
09...	340	100	77	78	34	34	31	32	2.4	2.3	232
FEB											
14...	360	85	79	79	40	40	19	19	1.5	1.7	278
MAR											
13...	320	120	75	74	33	32	21	21	1.5	1.4	197
MAY											
08...	370	130	87	85	40	39	11	11	0.3	0.30	240
JUN											
01...	360	130	97	89	38	34	9.1	9.0	1.0	0.55	235
JUL											
26...	300	84	70	69	32	31	18	18	2.3	1.9	216
AUG											
23...	290	61	65	60	37	35	11	11	2.1	1.8	233

05580500 KICKAPOO CREEK NEAR LINCOLN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
OCT											
24...	59	8	3	<0.100	<0.100	<0.001	0.080	[illegible]	230	<50	100
NOV											
17...	53	11	3	0.340	<0.100	<0.001	0.084	[illegible]	570	110	80
JAN											
09...	63	34	5	3.40	0.180	[illegible]	[illegible]	[illegible]	[illegible]	70	100
FEB											
14...	69	4	1	1.30	<0.100	<0.001	0.042	[illegible]	110	60	80
MAR											
13...	63	6	1	6.40	<0.100	<0.001	0.040	[illegible]	310	100	30
MAY											
08...	60	47	4	10.0	0.130	[illegible]	[illegible]	[illegible]	1000	250	90
JUN											
01...	50	212	17	14.0	<0.100	<0.001	0.220	[illegible]	2100	130	100
JUL											
26...	39	148	18	4.30	<0.100	<0.004	0.240	[illegible]	1800	<50	100
AUG											
23...	59	84	9	0.230	0.260	0.011	0.110	[illegible]	[illegible]	100	[illegible]

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT										
24...	140	<0.5	<0.5	60		<3	<3	[illegible]	<5	<5
NOV										
17...	77	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JAN										
09...	91	<0.5	<0.5	50	50	<3	<3	<5	<5	<5
FEB										
14...	78	<0.5	<0.5	50	--	<3	<3	[illegible]	7	<5
MAR										
13...	29	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAY										
08...	78	<0.5	<0.5	<50	<50	--	--	<5	<5	<5
JUN										
01...	93	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JUL										
26...	92	<0.5	<0.5	<50	<50	<3	<3	7	<5	<5
AUG										
23...	98	<0.5	<0.5	60	<50	<3	<3	6	<5	<5

05580500 KICKAPOO CREEK NEAR LINCOLN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT 24...	<5	<5	<5	620	63	<5	<5	200	150	0.07
NOV 17...	<5	<5	<5	730	<50	<5	<5	110	83	0.17
JAN 09...	<5	<5	<5	1400	<50	<5	<5	110	72	<0.05
FEB 14...	<5	<5	--	360	<50	<5	<5	110	110	<0.05
MAR 13...	<5	<5	<5	370	<50	<5	<5	46	28	<0.05
MAY 08...	<5	<5	<5	1300	<50	<5	<5	98	37	0.06
JUN 01...	<5	19	<5	4600	<50	7	<5	260	12	<0.05
JUL 26...	<5	<5	<5	2300	<50	<5	<5	140	19	13
AUG 23...	<5	7	<5	2300	<50	<5	<5	270	74	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 24...	<5	<5	<3	<3.0	170	160	11	<5	<50	<50
NOV 17...	<5	<5	<3	<3.0	130	--	<5	<5	<50	<50
JAN 09...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
FEB 14...	9	9	<3	<3.0	150	150	<5	<5	<50	<50
MAR 13...	<5	<5	<3	<3.0	120	120	<5	<5	<50	<50
MAY 08...	<5	<5	<3	<3.0	150	140	<5	<5	<50	<50
JUN 01...	6	<5	<3	<3.0	150	140	8	<5	<50	<50
JUL 26...	<5	<5	<3	<3.0	130	130	<5	<5	<50	<50
AUG 23...	11	<5	<5	<5.0	150	140	11	6	360	<50

05580950 SUGAR CREEK NEAR BLOOMINGTON, IL

LOCATION.--Lat 40°28'18", long 89°01'46", in NE1/4NW1/4 sec.7, T.23 N., R.2 E., McLean County, Hydrologic Unit 07130009, on left bank at Bloomington-Normal Sanitary District sewage-treatment plant, 250 ft upstream from Interstate 74 highway bridge, 0.4 mi west of Bloomington, and at mile 48.8.

DRAINAGE AREA.--34.4 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IL-82-2: Drainage area. WDR IL-87-2: 1985.

GAGE.--Water-stage recorder. Datum of gage is 725.11 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Discharge values include effluent of about 14 ft^3/s from the sewage-treatment plant.

AVERAGE DISCHARGE.--15 years, 51.4 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,600 ft^3/s, Dec. 3, 1982, gage height, 14.02 ft, from floodmark; minimum daily, 9.0 ft^3/s, Dec. 25, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,710 ft^3/s, Sept. 1, gage height, 8.14 ft; minimum daily, 17 ft^3/s, Oct. 8, 9, Dec. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	19	20	19	20	21	21	26	24	20	21	372
2	26	19	19	19	19	20	130	26	24	65	22	40
3	18	21	20	19	20	62	128	25	32	26	22	27
4	18	26	19	20	18	78	61	28	24	21	22	24
5	19	20	20	36	19	31	37	28	24	21	22	25
6	18	19	19	29	20	27	33	24	24	21	20	38
7	18	19	19	29	20	e24	30	23	23	21	20	28
8	17	19	19	23	20	e22	85	27	22	49	21	281
9	17	77	19	21	19	e21	37	57	20	24	21	143
10	18	71	19	22	21	e20	32	27	20	21	21	43
11	18	21	18	23	20	e20	30	24	20	21	21	33
12	19	67	19	22	20	e20	30	24	67	21	20	30
13	18	23	20	20	25	e20	27	23	29	21	20	98
14	18	20	20	21	22	e20	27	22	23	22	28	52
15	21	24	19	20	28	e20	26	22	21	22	34	35
16	18	60	17	22	43	e20	25	22	21	21	21	32
17	36	23	18	22	25	e20	25	22	20	22	21	28
18	21	20	18	21	e22	e60	30	22	20	35	21	27
19	19	77	20	21	e20	e70	25	151	21	48	21	26
20	19	51	18	20	e30	e35	24	43	21	252	21	26
21	19	23	18	21	e26	e30	24	27	21	165	21	26
22	18	21	246	20	e22	e28	23	27	20	31	26	25
23	49	22	46	21	e20	e26	90	26	23	25	70	23
24	19	19	25	20	e20	e24	28	25	20	24	25	23
25	20	19	19	30	e20	e23	26	225	19	23	23	23
26	20	35	23	22	e30	e23	36	112	21	25	23	23
27	20	26	51	21	e25	e23	47	39	68	24	37	23
28	20	20	25	20	22	45	47	29	23	22	26	23
29	18	20	24	22	---	23	29	27	20	21	30	24
30	18	20	22	20	---	22	26	27	21	20	23	22
31	19	---	20	21	---	21	---	25	---	21	173	---
TOTAL	646	921	899	687	636	919	1239	1255	756	1175	917	1643
MEAN	20.8	30.7	29.0	22.2	22.7	29.6	41.3	40.5	25.2	37.9	29.6	54.8
MAX	49	77	246	36	43	78	130	225	68	252	173	372
MIN	17	19	17	19	18	20	21	22	19	20	20	22

CAL YR 1988 TOTAL 11804 MEAN 32.3 MAX 346 MIN 14
WTR YR 1989 TOTAL 11693 MEAN 32.0 MAX 372 MIN 17

e Estimated

05581500 SUGAR CREEK NEAR HARTSBURG, IL

LOCATION.--Lat 40°13'20", long 89°24'12", in SE1/4SW1/4 sec.35, T.21 N., R.3 W., Logan County, Hydrologic Unit 07130009, at bridge on county road, 0.4 mi upstream from State Highway 121, 2.6 mi southeast of Hartsburg, 4.1 mi northwest of Lincoln, 6.6 mi downstream from West Fork, and at mile 15.4.

DRAINAGE AREA.--333 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 24...	1100	17002	17002	89	707	7.90	7.0	9.1	9.1	26	290
NOV 17...	1200	17002	17002	68	700	7.60	6.0	15	11.0	26	K850
JAN 09...	1130	17002	17002	64	1010	7.60	0.0	7.0	13.9	16	K20
FEB 14...	1100	17002	17002	52	916	7.70	0.0	0.90	15.9	29	K4
MAR 13...	1130	17002	17002	46	851	8.40	7.5	2.5	14.5	24	K4
MAY 08...	1100	17002	17002	--	824	8.20	13.0	3.5	12.1	19	160
JUN 01...	1100	17002	17002	143	803	7.80	23.5	7.5	7.1	16	K180
JUL 26...	1000	17002	17002	--	493	7.70	25.5	39	6.2	20	1200
AUG 23...	1100	17002	17002	34	758	7.80	23.5	45	6.8	27	2900

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 24...	220	220	51	50	24	23	59	59	7.5	7.4	80
NOV 17...	240	240	56	54	25	25	56	55	7.4	7.1	80
JAN 09...	250	250	60	59	26	26	97	96	5.5	5.4	75
FEB 14...	270	270	58	58	30	30	79	79	7.6	7.5	95
MAR 13...	300	300	72	69	33	31	67	63	5.4	5.0	95
MAY 08...	340	340	75	75	36	36	46	45	3.3	3.3	81
JUN 01...	360	360	90	88	36	35	24	24	2.7	2.4	66
JUL 26...	180	180	46	42	20	18	21	20	6.0	5.4	44
AUG 23...	210	210	57	49	26	22	60	55	7.9	6.8	81

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT											
24...	80	300	45	6	3.30	<0.100	<0.001	2.50	2.40	610	<50
NOV											
17...	72	294	6	2	7.40	0.260	0.001	2.40	2.30	890	120
JAN											
09...	160	421	8	2	4.60	0.510	0.002	1.33	1.30	330	50
FEB											
14...	100	374	6	2	6.00	3.00	0.013	2.40	2.30	170	<50
MAR											
13...	100	364	6	3	5.30	<0.100	<0.004	1.31	1.20	210	60
MAY											
08...	75	316	21	4	7.20	<0.100	<0.004	1.03	0.890	630	270
JUN											
01...	50	266	100	12	12.0	0.110	0.004	0.530	0.440	1700	200
JUL											
26...	34	164	101	10	2.40	<0.100	<0.003	0.790	0.650	2200	<50
AUG											
23...	77	291	139	16	4.50	0.330	0.011	2.40	1.90	2200	70

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT											
24...	30	25	<0.5	<0.5	240	230	<3	<3	<5	<5	<5
NOV											
17...	40	31	<0.5	<0.5	230	220	<3	<3	<5	<5	<5
JAN											
09...	50	48	<0.5	<0.5	130	130	<3	<3	<5	<5	<5
FEB											
14...	30	32	<0.5	<0.5	250	250	<3	<3	9	7	<5
MAR											
13...	10	11	<0.5	<0.5	160	150	<3	<3	<5	5	<5
MAY											
08...	60	52	<0.5	<0.5	130	130	--	--	<5	<5	<5
JUN											
01...	100	90	<0.5	<0.5	90	90	<3	<3	<5	<5	<5
JUL											
26...	70	49	<0.5	<0.5	110	100	<3	<3	27	<5	<5
AUG											
23...	80	40	<0.5	<0.5	250	210	<3	<3	6	<5	<5

05581500 SUGAR CREEK NEAR HARTSBURG, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
OCT										
24...	<5	<5	<5	1000	55	<5	<5	120	48	15
NOV										
17...	<5	<5	<5	1100	52	<5	<5	160	120	14
JAN										
09...	<5	<5	<5	480	<50	<5	<5	130	110	<5
FEB										
14...	<5	<5	<5	310	86	<5	<5	140	140	14
MAR										
13...	<5	<5	<5	290	<50	<5	<5	140	120	<5
MAY										
08...	<5	<5	<5	700	83	<5	<5	130	88	<5
JUN										
01...	<5	<5	<5	2200	<50	<5	<5	170	45	<5
JUL										
26...	<5	<5	<5	2800	<50	<5	<5	190	41	<5
AUG										
23...	<5	<5	<5	3200	<50	<5	<5	310	130	13

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, TOTAL (UG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT										
24...	14	<3	<3.0	120	110	5	<5	<50	<50	1
NOV										
17...	9	<3	<3.0	140	130	<5	<5	<50	<50	1
JAN										
09...	<5	<3	<3.0	150	150	<5	<5	<50	<50	1
FEB										
14...	13	<3	<3.0	140	140	<5	<5	<50	<50	1
MAR										
13...	<5	<3	<5.0	150	140	<5	<5	<50	<50	1
MAY										
08...	<5	<3	<3.0	150	150	<5	<5	<50	<50	1
JUN										
01...	5	<3	<3.0	160	160	6	<5	<50	<50	2
JUL										
26...	<5	<3	<3.0	100	88	5	<5	<50	<50	--
AUG										
23...	14	<5	<5.0	130	110	13	<5	<50	<50	--

05582000 SALT CREEK NEAR GREENVIEW, IL

LOCATION.--Lat 40°08'01", long 89°44'08", in NE1/4NE1/4 sec.2, T.19 N., R.6 W., Mason County, Hydrologic Unit 07130009, near center of span on downstream side of bridge on State Highway 29, 3.3 mi downstream from Pike Creek, 3.5 mi north of Greenview, and at mile 4.9.

DRAINAGE AREA.--1,804 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WSP 1175: 1948(P). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 479.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 3, 1972, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--48 years, 1,276 ft^3/s, 9.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,200 ft^3/s, May 19, 1943, gage height, 20.50 ft, from graph based on gage readings; minimum, 46 ft^3/s, Sept. 25, 26, Oct. 12-14, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	1930	*6,910	*9.60	No other peak greater than base discharge.			

Minimum discharge, 56 ft^3/s, Oct. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	69	81	e120	134	113	292	2180	2600	689	191	896
2	71	69	e80	e110	133	127	285	1950	2280	650	183	2380
3	73	71	e76	e105	133	132	298	1760	2090	621	175	1730
4	89	76	e74	e100	e110	198	471	1590	1930	599	164	965
5	72	78	e72	e100	e100	411	1020	1480	1760	565	154	637
6	69	83	e70	e110	e94	491	1220	1380	1620	561	147	471
7	69	83	e66	e130	e90	397	e1300	1240	1490	625	140	391
8	67	76	e64	e150	e85	406	e1400	1150	1390	588	134	417
9	64	78	e62	e170	e80	470	e1300	1220	1300	557	129	1760
10	63	114	e60	e190	e156	438	e1260	1380	1210	527	130	2960
11	59	180	e62	e220	e74	441	e1100	1320	1120	500	119	2190
12	56	155	e64	243	e70	457	e1040	1170	1100	485	121	1570
13	59	162	e65	192	e72	455	990	1100	1140	474	118	1330
14	62	190	e68	172	e74	420	929	1030	1090	520	117	1400
15	63	145	e70	182	e80	393	890	974	1010	479	118	1670
16	63	125	e67	165	e73	374	859	901	949	470	122	1700
17	62	e120	e66	163	e72	355	820	814	904	434	126	1470
18	75	e110	e62	155	e67	338	779	813	862	804	107	1260
19	79	e100	e66	153	e65	336	753	1030	819	1260	104	1090
20	113	e120	e70	143	e64	350	737	1070	788	919	104	940
21	92	153	e90	140	e63	354	704	982	764	731	101	824
22	86	238	e130	136	e72	347	681	972	742	722	104	732
23	88	223	e200	130	e85	355	791	976	720	383	105	632
24	82	152	e300	129	e92	346	1540	2360	685	404	189	545
25	109	121	e200	131	e85	330	1770	6420	702	346	227	483
26	86	116	e170	140	e90	323	1510	6040	697	307	168	436
27	78	113	e150	147	e92	310	1430	5150	719	265	137	410
28	77	114	e200	145	e100	297	2190	3810	854	238	130	384
29	74	98	e170	143	---	291	2860	3520	839	311	365	364
30	72	86	e140	143	---	296	2520	3390	755	241	394	347
31	74	---	e130	139	---	310	---	3070	---	209	426	---
TOTAL	2314	3618	3245	4596	2505	10661	33739	62242	34929	16484	5049	32384
MEAN	74.6	121	105	148	89.5	344	1125	2008	1164	532	163	1079
MAX	113	238	300	243	156	491	2860	6420	2600	1260	426	2960
MIN	56	69	60	100	63	113	285	813	685	209	101	347
CFSM	.04	.07	.06	.08	.05	.19	.62	1.11	.65	.29	.09	.60
IN.	.05	.07	.07	.09	.05	.22	.70	1.28	.72	.34	.10	.67

CAL YR 1988 TOTAL 217014 MEAN 593 MAX 3500 MIN 56 CFSM .33 IN. 4.48
WTR YR 1989 TOTAL 211766 MEAN 580 MAX 6420 MIN 56 CFSM .32 IN. 4.37

e Estimated

05582000 SALT CREEK NEAR GREENVIEW, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EI 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
NOV 07...	1230	17002	17002	86	703	6.90	8.0	--	13.2	12	K15	320
DEC 20...	1200	17002	17002	70	740	6.40	8.0	5.2	12.7	6	<5	320
JAN 25...	1230	17002	17002	150	719	6.90	7.0	2.0	12.3	9	K35	320
MAR 01...	1230	17002	17002	122	777	8.60	3.0	2.5	14.4	9	K55	330
APR 04...	1230	17002	17002	373	695	7.40	10.0	16	10.3	30	K12000	290
MAY 22...	1230	17002	17002	972	634	7.10	18.0	11	7.6	19	K200	290
JUN 22...	1200	17002	17002	738	711	8.20	25.5	8.7	8.8	15	K180	370
JUL 31...	1230	17002	17002	209	653	8.40	26.0	3.3	9.5	16	K40	330
SEP 11...	1230	17002	17002	2070	522	7.50	21.0	1.8	7.9	24	1400	250

DATE	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
NOV 07...	320	73	72	33	33	34	34	3.1	3.1	3	<1	2.20
DEC 20...	320	75	73	35	34	37	36	3.0	2.9	--	--	2.80
JAN 25...	320	72	72	34	34	29	29	2.2	2.2	10	2	3.00
MAR 01...	330	74	73	36	36	39	39	2.4	2.5	8	3	2.40
APR 04...	290	77	66	34	31	32	32	3.5	2.8	308	24	4.00
MAY 22...	290	70	67	32	30	13	13	1.1	0.62	134	14	7.30
JUN 22...	370	86	83	40	39	17	17	0.6	0.40	28	4	5.20
JUL 31...	330	75	73	36	36	18	18	2.9	2.1	41	8	0.710
SEP 11...	250	63	58	27	25	9.2	9.0	4.2	3.5	218	24	5.00

05582000 SALT CREEK NEAR GREENVIEW, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)
NOV 07...	<0.100	<0.001	0.670	0.620	110	<50	60	52	<0.5	<0.5	110	110
DEC 20...	0.120	<0.001	0.540	0.460	220	<50	60	55	<0.5	<0.5	90	90
JAN 25...	<0.100	<0.001	0.474	0.410	210	70	70	64	<0.5	<0.5	90	90
MAR 01...	<0.100	<0.004	0.470	0.400	200	130	50	51	<0.5	<1	90	90
APR 04...	0.360	0.002	0.750	0.370	3300	180	100	73	<0.5	<0.5	80	80
MAY 22...	0.150	<0.001	0.220	0.120	2800	170	100	78	<0.5	<0.5	<50	<50
JUN 22...	<0.100	<0.009	0.220	0.120	1400	<50	100	87	<1.0	<0.5	<50	<50
JUL 31...	<0.100	<0.014	0.210	0.120	730	60	80	75	<0.5	<0.5	50	--
SEP 11...	<0.100	<0.001	0.410	0.230	4100	70	100	73	<1.0	<0.5	70	60

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
NOV 07...	<3	<3	<5	<5	<5	<5	<5	<5	350	150	<5	<5
DEC 20...	<3	<3	<5	<5	<5	<5	<5	<5	580	<50	<5	<5
JAN 25...	<3	<3	5	5	<5	<5	<5	<5	440	52	<5	<5
MAR 01...	<3	<3	9	8	6	6	<5	<5	420	140	<5	<5
APR 04...	<3	<3	7	<5	<5	<5	7	<5	5200	<50	6	<5
MAY 22...	<3	<3	<5	<5	<5	<5	<5	<5	3700	<50	5	<5
JUN 22...	<3	<3	<5	<5	<5	<5	<5	<5	1800	<50	<5	<5
JUL 31...	<3	<3	<5	<5	<5	<5	<5	<5	1000	<50	<5	<5
SEP 11...	<3	<3	10	<5	<5	<5	8	<5	6000	<50	6	<5

05582000 SALT CREEK NEAR GREENVIEW, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
NOV 07...	320	280	<5	<5	<3	<3.0	120	120	<5	<5	<50	<50
DEC 20...	320	260	13	6	<3	<3.0	130	130	<5	<5	<50	<50
JAN 25...	260	230	10	8	<5	<5.0	140	140	<5	<5	<50	<50
MAR 01...	260	240	10	9	<5	<3.0	140	140	<5	<5	<50	<50
APR 04...	720	100	8	<5	<3	<3.0	150	140	6	<5	<50	<50
MAY 22...	260	<5	<5	<5	<3	<3.0	140	130	<5	<5	<50	<50
JUN 22...	160	11	<5	<5	<3	<3.0	150	150	6	<5	<50	<50
JUL 31...	130	29	<5	<5	<3	<3.0	140	140	<5	<5	<100	<100
SEP 11...	290	<5	14	<5	<3	<3.0	110	110	10	<5	<100	<100

05583000 SANGAMON RIVER NEAR OAKFORD, IL
(National stream-quality accounting network station)

LOCATION.--Lat 40°07'25", long 89°59'05", in NW1/4SE1/4 sec.3, T.19 N., R.8 W., Mason County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highway 97, 300 ft upstream from Chicago & Illinois Midland Railway bridge, 0.8 mi downstream from Crane Creek, 1.8 mi northwest of Oakford, and at mile 25.7.

DRAINAGE AREA.--5,093 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1909 to October 1911, December 1911 to March 1912, August 1914 to June 1919, March 1921 to September 1922, October 1928 to December 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 715: 1922(M). WSP 1175: 1912(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 452.88 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 1, 1934, nonrecording gage at site 2.4 mi upstream at datum 458.66 ft above NGVD. Oct. 1, 1939, to May 14, 1940, nonrecording gage at present site at datum at NGVD.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--62 years (water years 1910-11, 1915-18, 1922, 1929-33, 1940-89), 3,317 ft^3/s, 8.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 123,000 ft^3/s, May 20, 1943, gage height, 25.63 ft; minimum, 45 ft^3/s, Jan. 21-31, 1918, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,300 ft^3/s, May 28; maximum gage height, 12.23 ft, May 28; minimum discharge, 176 ft^3/s, Oct. 16, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	216	325	e440	504	e350	1120	6450	9080	1160	489	1260
2	215	216	306	e430	439	e420	1170	6440	8590	975	442	4660
3	211	219	284	424	397	482	1210	6140	8170	868	419	4330
4	222	226	271	404	e390	554	2160	5310	7540	848	406	2230
5	219	218	263	426	e380	701	4200	4560	6630	832	406	1410
6	214	227	258	406	e380	980	5070	4040	5430	757	378	1060
7	217	230	246	408	e370	1080	5180	3570	4260	710	359	871
8	213	241	244	506	e360	1040	5300	3210	3530	671	348	824
9	203	276	242	528	e350	983	5470	3100	3090	676	339	2750
10	195	298	235	510	e340	889	5730	3210	2750	628	334	5060
11	189	307	228	593	e330	1330	5550	3470	2580	591	349	4340
12	188	408	197	699	e330	1560	4960	3120	2320	554	333	3140
13	189	330	296	682	e320	1520	4320	2710	2260	546	322	2480
14	193	434	236	649	e310	1720	3830	2620	2380	532	317	2400
15	192	396	225	706	e300	1730	3430	2470	2180	510	318	2610
16	184	384	250	702	e295	1800	3040	2300	2020	485	312	2710
17	186	357	274	665	e290	1680	2790	2060	1780	467	322	2490
18	191	404	278	623	e280	1660	2530	1960	1680	460	302	2160
19	206	505	273	481	e280	1410	2440	1960	1500	499	294	1860
20	250	552	251	407	e270	1340	2290	1970	1540	570	290	1660
21	249	610	237	430	e270	1270	2090	2200	1500	1070	288	1500
22	244	808	270	434	e260	1350	1980	2350	1420	1330	296	1290
23	257	857	442	437	e270	1560	2010	2630	1310	1120	295	1050
24	239	817	1230	436	e280	1600	2420	3150	1140	1100	350	911
25	240	627	1090	405	e350	1780	3550	3600	1140	882	423	811
26	262	573	806	417	e320	1780	3730	9630	1140	730	421	734
27	242	542	620	462	e310	1710	3380	11000	1110	611	353	684
28	242	536	577	469	e320	1490	4420	10900	1220	540	341	678
29	238	441	e520	497	---	1200	6530	9650	1260	508	643	771
30	228	364	e490	484	---	1240	6270	9570	1320	486	837	670
31	224	---	e450	539	---	1200	---	9400	---	519	729	---
TOTAL	6760	12619	11914	15699	9295	39409	108170	144750	91870	22235	12055	59404
MEAN	218	421	384	506	332	1271	3606	4669	3062	717	389	1980
MAX	262	857	1230	706	504	1800	6530	11000	9080	1330	837	5060
MIN	184	216	197	404	260	350	1120	1960	1110	460	288	670
CFSM	.04	.08	.08	.10	.07	.25	.71	.92	.60	.14	.08	.39
IN.	.05	.09	.09	.11	.07	.29	.79	1.06	.67	.16	.09	.43

CAL YR 1988 TOTAL 684973 MEAN 1872 MAX 11600 MIN 170 CFSM .37 IN. 5.00
WTR YR 1989 TOTAL 534180 MEAN 1464 MAX 11000 MIN 184 CFSM .29 IN. 3.90

e Estimated

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING DEPTH (FEET) (00003)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT												
03...	1000	17002	17002	211	--	--	1120	8.00	15.0	14	9.9	23
03...	1010	81700	17002	211	--	--	1110	8.30	16.0	7.3	12.6	25
NOV												
15...	1250	81700	80020	392	--	--	890	--	11.5	8.2	9.8	--
15...	1255	81700	17002	392	--	--	890	--	11.5	11	9.8	23
JAN												
05...	1310	81700	80020	404	--	--	820	8.00	2.5	7.7	13.4	--
05...	1315	81700	17002	404	--	--	820	8.00	2.5	8.6	13.4	10
FEB												
23...	0945	81700	80020	--	--	--	1200	8.10	0.0	9.5	13.6	--
23...	0950	81700	17002	270	--	--	1200	8.10	0.0	5.3	13.6	12
APR												
20...	0830	81700	80020	2340	--	--	669	8.20	13.0	--	9.5	--
20...	0900	17002	17002	2350	--	--	682	7.90	13.0	10	9.4	15
20...	0905	81700	17002	2350	--	--	669	8.20	13.0	10	9.5	15
20...	0910	81700	80020	2340	--	--	669	8.20	13.0	--	9.5	--
MAY												
23...	1310	81700	17002	2630	--	--	664	8.40	19.5	11	8.9	21
23...	1430	81700	80020	2620	--	--	664	8.40	19.5	--	8.9	--
JUL												
12...	1130	81700	80020	554	--	--	797	8.40	27.0	12	9.6	--
12...	1132	81700	81700	--	1.00	100	780	8.29	26.5	--	9.0	--
12...	1134	81700	81700	--	1.00	80.0	784	8.38	27.0	--	9.4	--
12...	1135	81700	17002	554	--	--	800	8.40	27.0	8.1	9.6	22
12...	1136	81700	81700	--	1.00	60.0	785	8.40	27.0	--	9.5	--
12...	1138	81700	81700	--	1.00	40.0	814	8.45	27.5	--	10.0	--
12...	1140	81700	81700	--	1.00	20.0	824	8.48	27.5	--	10.2	--
AUG												
23...	0935	81700	80020	290	--	--	872	8.30	24.0	12	7.2	--
23...	0940	81700	17002	290	--	--	872	8.30	24.0	9.0	7.2	26

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT												
03...	K50	--	--	320	57	--	75	72	34	34	130	130
03...	K100	--	K100	300	40	--	71	68	33	32	130	120
NOV												
15...	K40	--	--	250	51	--	--	57	--	27	--	100
15...	K40	--	220	260	56	<1.0	60	59	27	27	110	100
JAN												
05...	K18	--	--	290	74	--	--	66	--	30	--	58
05...	K18	--	90	290	71	--	69	67	30	29	61	59
FEB												
23...	<4	<4	K4	340	81	--	--	76	--	36	--	120
23...	--	--	--	340	--	--	76	--	35	36	120	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	K20	--	--	310	120	--	69	68	33	33	26	26
20...	59	33	32	310	130	--	69	68	34	33	25	25
20...	59	33	32	310	120	--	--	69	--	33	--	26
MAY												
23...	K200	--	--	290	89	--	71	67	31	29	25	24
23...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
12...	47	K19	K11	330	--	--	--	70	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	47	--	--	320	74	--	75	73	34	33	59	59
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
23...	K170	K230	200	290	53	--	--	65	--	31	--	76
23...	K170	--	--	310	87	--	69	68	33	33	80	81

DATE	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT												
03...	6.1	6.2	--		--	--	263	110	150	0.4	--	--
03...	6.3	5.9	--	--	--	--	262	100	150	0.5	--	--
NOV												
15...	--	5.6	--	--	--	--	203	90	120	--	0.40	7.9
15...	6.9	6.7	--	--	--	--	201	94	110	0.3	--	--
JAN												
05...	--	4.0	0	266	218	215	225	87	92	--	0.30	9.6
05...	3.6	3.5	--	--	--	--	216	80	86	0.3	--	--
FEB												
23...	--	4.8	0	210	172	--	258	110	160	--	0.40	7.6
23...	5.3	5.4	--	--	--	--	257	96	150	0.4	--	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	2.1	1.3	--	--	--	--	189	75	49	0.3	--	--
20...	1.8	1.9	--	--	--	--	177	65	49	0.3	--	--
20...	--	2.2	0	227	186	--	190	68	50	--	0.20	4.9
MAY												
23...	2.2	1.9	--	--	--	--	198	57	47	0.3	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
12...	--	--	48	148	201	--	248	82	81	--	0.30	4.9
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	3.7	3.2	--	--	--	245	--	80	79	0.3	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
23...	--	4.0	0	277	227	--	237	85	100	--	0.40	3.9
23...	4.3	3.7	--	--	--	--	219	87	99	0.4	--	--

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT												
03...	--	659	15	6	0.830	--	<0.100	<0.003	--	--	0.30	0.93
03...	--	637	20	9	0.600	--	<0.100	<0.006	--	--	0.50	1.1
NOV												
15...	540	540	--	--	--	1.30	0.820	--	0.870	1.4	2.2	--
15...	--	526	18	5	1.30	--	0.900	--	--	0.90	1.8	3.1
JAN												
05...	483	486	--	--	--	1.80	0.820	--	0.830	0.98	1.8	--
05...	--	454	15	3	2.50	--	0.920	0.010	--	0.68	1.6	4.1
FEB												
23...	684	684	--	--	--	2.70	0.460	--	0.460	0.14	0.60	--
23...	--	--	6	2	2.50	--	0.500	0.005	--	0.60	1.1	3.6
APR												
20...	--	--	--	--	--	7.80	--	--	--	--	--	--
20...	--	366	79	9	9.20	--	<0.100	<0.002	--	--	1.4	11
20...	--	349	87	10	8.50	--	0.140	0.005	--	1.2	1.3	9.8
20...	516	402	--	--	--	7.80	0.021	--	0.021	0.68	0.70	--
MAY												
23...	--	345	141	16	8.80	--	<0.100	<0.009	--	--	1.9	11
23...	--	--	--	--	--	9.20	--	--	--	--	--	--
JUL												
12...	506	481	--	--	--	1.60	0.041	--	0.030	0.46	0.50	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	475	38	9	1.50	--	0.140	--	--	1.5	1.6	3.1
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
23...	533	508	--	--	--	<0.100	0.020	--	0.010	2.2	2.2	--
23...	--	504	80	23	<0.100	--	<0.100	<0.010	--	--	1.2	--

DATE	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT												
03...	0.830	0.700	360	<50	5	--	60	41	<0.5	<0.5	150	--
03...	0.800	0.670	340	<50	5	--	60	46	<0.5	<0.5	150	150
NOV												
15...	1.10	0.980	--	<10	--	2	--	53	--	<0.5	--	--
15...	1.40	1.20	550	110	3	--	60	44	<0.5	<0.5	170	--
JAN												
05...	0.540	0.450	--	--	--	--	--	--	--	--	--	--
05...	0.520	0.440	440	80	2	--	70	56	<0.5	<0.5	130	--
FEB												
23...	0.750	0.660	--	50	--	1	--	57	--	<0.5	--	--
23...	0.730	0.630	220	70	2	--	60	50	<0.5	<0.5	180	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	0.290	0.180	1700	110	1	-	80	56	<0.5	<0.5	50	60
20...	0.218	0.170	1600	<100	2	1	80	58	<0.5	<0.5	50	50
20...	0.180	0.171	--	<10	--	1	--	69	--	<0.5	--	--
MAY												
23...	0.410	0.210	2700	340	2	--	100	75	<0.5	<0.5	60	60
23...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
12...	0.250	0.190	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	0.320	0.220	520	100	2	--	80	70	<0.5	<0.5	140	140
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
23...	0.400	0.180	--	<10	--	3	--	63	--	<0.5	--	--
23...	0.310	0.150	700	70	3	--	70	63	<0.5	<0.5	310	310

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT											
03...	<3	<3	<5	<5	<5	<5	<5	<5	580	<50	<5
03...	<3	<3	<5	<5	<5	<5	<5	<5	610	<50	<5
NOV											
15...	--	<1	--	1	--	<3	--	2	--	68	--
15...	<3	<3	<5	<5	<5	<5	<5	<5	850	87	<5
JAN											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<3	<3	<5	<5	<5	<5	<5	7	660	57	<5
FEB											
23...	--	<1	--	<1	--	<3	--	2	--	140	--
23...	<3	<3	<5	<5	<5	<5	<5	9	570	<50	<5
APR											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	5	<5	<5	<5	<5	<5	2400	<50	<5
20...	--	<1	5	<5	7	<5	22	<5	4800	<50	6
20...	--	<1	--	<1	--	<3	--	2	--	3	--
MAY											
23...	<3	<3	14	<5	<5	<5	<5	<5	3500	<50	<5
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<3	<3	5	<5	<5	<5	<5	<5	590	<50	<5
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	<1	--	<1	--	<3	--	2	--	4	--
23...	<3	<3	<5	<5	<5	<5	<5	<5	1000	<50	<5

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)
OCT											
03...	<5	330	140	<0.05	--	6	<5	--	<3	<3.0	130
03...	<5	330	140	--	--	9	6	--	<3	<3.0	130
NOV											
15...	<5	--	240	--	0.2	--	5	<1	--	1.0	--
15...	31	340	230	--	--	<5	<5	--	<3	<3.0	130
JAN											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<5	170	130	--	--	<5	--	--	<3	<3.0	140
FEB											
23...	<5	--	230	--	--	--	1	<1	--	1.0	--
23...	<5	280	230	--	--	10	5	--	<3	<3.0	150
APR											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	<5	170	7	<0.05	--	6	<5	--	<3	<3.0	140
20...	<5	220	<5	--	--	360	<5	--	<3	<3.0	140
20...	<5	--	5	--	0.2	--	<7	1	--	<1.0	--
MAY											
23...	<5	240	<5	--	--	9	<5	--	<3	<3.0	140
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<5	150	24	--	--	<5	<5	--	<3	<3.0	140
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	<1	--	23	--	0.2	--	4	<1	--	<1.0	--
23...	<5	300	22	--	--	<10	<10	--	<3	<3.0	130

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
03...	120	<5	<5	<50	<50	<0.005	<5	1	--	--	--
03...	120	<5	<5	<50	<50	<0.005	<5	<1	--	--	--
NOV											
15...	110	--	<6	--	14	--	--	--	32	34	95
15...	--	<5	<5	<50	<50	<0.005	10	1	--	--	--
JAN											
05...	--	--	--	--	--	--	--	--	26	28	92
05...	140	<5	<5	570	<50	<0.005	<5	1	--	--	--
FEB											
23...	140	--	<6	--	21	--	--	--	--	--	--
23...	--	<5	<5	<50	<50	<0.005	55	--	--	--	--
APR											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	140	<5	<5	<50	<50	<0.005	<5	6	--	--	--
20...	140	<5	<5	<100	<100	<0.005	<5	55	--	--	--
20...	140	--	<6	--	6	--	--	--	98	619	93
MAY											
23...	140	5	<5	<50	<50	<0.005	<5	<1	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	--	--	--	--	--	--	--	--	42	63	92
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	140	5	<5	<50	<50	0.005	<5	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	130	--	<6	--	8	--	--	--	41	32	97
23...	130	<5	<5	<100	<100	<0.005	<5	--	--	--	--

05584500 LA MOINE RIVER AT COLMAR, IL

LOCATION.--Lat 40°19'45", long 90°53'55", in SE1/4SW1/4 sec.18, T.4 N., R.4 W., McDonough County, Hydrologic Unit 07130010, on right bank at downstream side of bridge on State Highway 61, 0.2 mi downstream from Burlington Northern Railroad bridge, 1 mi southwest of Colmar, 1.8 mi upstream from Troublesome Creek, and at mile 61.8.

DRAINAGE AREA.--655 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 491.53 ft above National Geodetic Vertical Datum of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--45 years, 439 ft^3/s, 9.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,900 ft^3/s, Mar. 5, 1985, gage height, 26.61 ft; maximum gage height, 27.03 ft, Jan. 3, 1965 (ice jam); no flow part of each day Dec. 8, 9, 12, 13, 17, 21, 1955, due to temporary dam upstream, no flow Oct. 19, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 28	0030	*1,100	*10.81				

No flow Oct. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	1.5	6.8	e8.0	17	e4.2	e80	60	21	23	2.5	6.7
2	.75	1.3	6.0	e7.6	16	e5.0	e320	38	40	13	2.2	3.6
3	.59	1.4	5.5	e7.0	13	e6.5	e200	27	33	8.9	1.9	2.0
4	.51	1.7	5.0	e6.6	11	e9.0	e130	24	19	6.9	2.9	3.8
5	.46	2.0	4.5	e6.2	e7.0	38	e80	22	13	5.6	2.4	4.6
6	.62	2.0	4.2	e5.5	e4.1	211	44	19	10	4.0	2.0	3.4
7	.75	2.0	4.0	e6.0	e4.5	164	34	17	9.4	3.4	1.4	2.8
8	.78	2.1	e3.5	e6.6	e5.0	93	31	17	8.6	2.9	1.2	3.6
9	.67	2.2	e3.2	e7.2	e4.7	58	33	42	8.7	2.6	.91	312
10	.66	2.8	e3.0	e8.0	e4.5	44	29	255	8.2	2.7	.84	161
11	.53	3.7	e2.7	e9.0	e4.2	42	28	80	7.0	2.3	.74	62
12	.33	12	e3.0	e9.5	e4.1	45	25	39	8.7	2.1	.45	28
13	.35	6.9	e3.5	e8.6	e3.9	48	21	27	219	1.7	.42	14
14	.37	6.2	e3.0	e8.0	e3.7	45	18	20	228	1.8	.42	8.3
15	.35	7.0	e2.6	e7.2	e3.5	36	16	16	70	1.5	.42	5.6
16	.28	6.2	e2.2	e6.6	e4.0	28	14	14	29	1.2	.42	3.8
17	.16	6.1	e2.4	e6.2	e4.3	22	13	14	18	1.0	.47	2.8
18	.01	6.6	e2.6	e5.8	e4.1	17	12	19	13	1.1	.47	2.0
19	.00	6.5	e2.9	e5.4	e4.0	15	12	20	10	2.1	.56	1.4
20	.05	5.6	e3.3	e5.2	e4.2	14	11	20	8.9	1.9	.56	.94
21	.16	5.4	e3.8	e4.8	e4.4	12	11	22	7.4	2.8	.56	.42
22	.18	5.1	4.6	e4.6	e4.5	12	10	24	6.1	3.8	.78	.49
23	.35	4.7	5.8	e5.2	e4.5	11	13	19	5.0	13	70	.38
24	.34	4.5	7.5	e5.7	e4.2	11	19	19	4.8	8.9	33	.40
25	.61	4.2	7.0	e6.2	e4.0	10	25	19	4.4	5.8	30	.49
26	.87	5.4	e6.6	e6.8	e3.9	9.9	29	19	86	4.0	15	.49
27	2.1	7.2	e6.3	e7.6	e3.7	9.8	543	18	362	3.0	20	.49
28	2.1	11	e5.9	e8.5	e3.6	13	686	19	335	2.4	24	.49
29	1.8	7.5	e5.5	e9.5	---	16	234	20	139	2.1	12	.49
30	1.7	7.6	e6.5	e11	---	e12	122	25	49	3.5	11	.49
31	1.6	---	e7.0	e13	---	e15	---	22	---	2.8	9.8	---
TOTAL	20.89	148.4	140.4	223.1	159.6	1076.4	2843	1016	1781.2	141.8	249.32	636.97
MEAN	.67	4.95	4.53	7.20	5.70	34.7	94.8	32.8	59.4	4.57	8.04	21.2
MAX	2.1	12	7.5	13	17	211	686	255	362	23	70	312
MIN	.00	1.3	2.2	4.6	3.5	4.2	10	14	4.4	1.0	.42	.38
CFSM	.00	.01	.01	.01	.01	.05	.14	.05	.09	.01	.01	.03
IN.	.00	.01	.01	.01	.01	.06	.16	.06	.10	.01	.01	.04

CAL YR 1988 TOTAL 29820.21 MEAN 81.5 MAX 1940 MIN .00 CFSM .12 IN. 1.69
WTR YR 1989 TOTAL 8437.08 MEAN 23.1 MAX 686 MIN .00 CFSM .04 IN. .48

e Estimated

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV												
07...	1000	17002	17002	1.3	595	6.90	5.0	--	6.0	33	K40	310
DEC												
06...	1030	17002	17002	4.2	722	6.80	2.0	11	10.8	15	K15	270
JAN												
19...	1015	17002	17002	5.4	801	7.00	0.5	8.4	15.0	13	K20	240
FEB												
27...	1030	17002	17002	3.7	1040	6.90	0.5	7.7	12.0	15	K10	310
MAR												
29...	1000	17002	17002	15	627	7.30	15.5	11	7.4	25	100	230
APR												
20...	1515	81700	80020	11	700	8.30	17.0	--	10.2	--	--	--
MAY												
09...	1000	17002	17002	54	570	7.50	13.5	51	8.0	33	2800	230
JUN												
03...	1205	81700	80020	16	648	7.40	22.0	--	5.9	--	--	--
23...	1000	17002	17002	5.0	483	7.30	24.5	22	5.2	27	K200	190
AUG												
16...	1100	17002	17002	0.50	576	6.90	23.5	14	3.7	31	K40	240
SEP												
20...	1000	17002	17002	0.90	456	6.80	17.5	4.0	7.0	25	760	180

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV												
07...	36	76	78	28	28	20	20	3.6	3.7	274	32	6
DEC												
06...	62	66	65	26	26	58	57	5.0	4.8	208	97	4
JAN												
19...	61	59	58	23	23	71	68	3.7	3.5	179	120	3
FEB												
27...	110	79	76	30	29	110	100	5.9	5.6	203	150	2
MAR												
29...	68	62	60	21	20	36	35	5.1	4.7	165	110	35
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
09...	100	64	61	22	20	24	24	7.5	6.3	135	95	195
JUN												
03...	--	--	--	--	--	--	--	--	--	--	--	--
23...	27	51	50	16	16	22	22	6.3	6.6	164	47	132
AUG												
16...	0	62	61	20	20	25	25	4.7	4.0	238	41	128
SEP												
20...	26	50	49	16	15	24	24	5.4	5.2	159	47	47

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
NOV 07...	3	0.680	--	<0.100	<0.001	--	1.1	1.8	0.261	0.110	180
DEC 06...	2	0.120	--	<0.100	<0.001	--	0.50	0.62	0.100	0.030	130
JAN 19...	2	0.250	--	<0.100	<0.001	--	0.70	0.95	0.080	0.020	80
FEB 27...	2	0.620	--	<0.100	<0.001	--	0.80	1.4	0.070	0.020	180
MAR 29...	6	<0.100	--	0.140	<0.001	1.1	1.2	--	0.170	0.020	1100
APR 20...	--	--	<0.100	--	--	--	--	--	--	--	--
MAY 09...	24	1.20	--	0.530	0.004	--	<0.10	--	0.371	0.070	5400
JUN 03...	--	--	<0.100	--	--	--	--	--	--	--	--
23...	14	0.980	--	0.130	0.002	0.97	1.1	2.1	0.150	0.040	1200
AUG 16...	29	0.490	--	<0.100	<0.001	--	1.3	1.8	0.040	0.010	1200
SEP 20...	9	0.250	--	<0.100	<0.001	--	1.2	1.5	0.100	0.020	1400

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)
NOV 07...	<50	100	110	<0.5	<0.5	<50	<50	<3	<3	<5	<5
DEC 06...	<50	90	78	<0.5	<0.5	140	130	<3	<3	<5	<5
JAN 19...	<50	80	75	<0.5	<0.5	140	140	<3	<3	<5	<5
FEB 27...	70	90	84	<0.5	<0.5	210	210	<3	<3	<5	<5
MAR 29...	60	100	130	<0.5	<0.5	110	100	<3	<3	6	<5
APR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	120	200	120	<0.5	<0.5	70	70	<3	<3	9	<5
JUN 03...	--	--	--	--	--	--	--	--	--	--	--
23...	150	100	130	<0.5	<0.5	80	80	<3	<3	<5	<5
AUG 16...	<50	200	160	<0.5	<0.5	70	70	<3	<3	<5	<5
SEP 20...	90	200	130	<0.5	<0.5	70	70	<3	<3	<5	<5

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
NOV 07...	<5	<5	<5	<5	3200	1500	<5	<5	1800	--	<0.05
DEC 06...	<5	<5	<5	<5	1400	<50	<5	<5	300	280	<0.05
JAN 19...	<5	<5	8	<5	1200	180	<5	<5	220	210	<0.05
FEB 27...	<5	<5	<5	<5	1200	240	<5	<5	380	350	<0.05
MAR 29...	<5	<5	7	<5	2900	<50	<5	<5	1600	1500	<0.05
APR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	<5	<5	8	<5	7600	<50	6	<5	780	520	<0.05
JUN 03...	--	--	--	--	--	--	--	--	--	--	--
23...	<5	<5	<5	<5	1800	<50	<5	<5	890	660	<0.05
AUG 16...	<5	<5	<5	<5	2200	<50	<5	<5	1700	1500	<0.05
SEP 20...	<5	<5	<5	<5	2000	<50	<5	<5	910	830	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 07...	<5	<5	<3	<3.0	210	--	<5	<5	<50	<50	16
DEC 06...	<5	<5	<3	<3.0	220	220	<5	<5	<50	<50	7.6
JAN 19...	<5	<5	<3	<3.0	250	250	<5	<5	<100	--	7.7
FEB 27...	8	5	<3	<3.0	320	300	<5	<5	<50	<50	8.3
MAR 29...	8	<5	<3	<3.0	220	220	<5	<5	<50	<50	9.6
APR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	5	<5	<3	<3.0	190	180	12	<5	<100	<100	11
JUN 03...	--	--	--	--	--	--	--	--	--	--	--
23...	7	--	<3	<3.0	150	150	<5	<5	<50	<50	10
AUG 16...	<5	<5	<3	<3.0	220	200	<5	<5	<100	<100	--
SEP 20...	<5	<5	<3	<3.0	170	160	<5	<5	<50	<50	10

05585000 LA MOINE RIVER AT RIPLEY, IL

LOCATION.--Lat 40°01'31", long 90°37'55", in SW1/4NE1/4 sec.33, T.1 N., R.2 W., Brown County, Hydrologic Unit 07130010, on right bank 600 ft downstream from bridge on U.S. Highway 24, 0.2 mi east of Ripley, 2 mi upstream from Town Branch, and at mile 12.3.

DRAINAGE AREA.--1,293 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to current year. Prior to October 1931 published as Crooked Creek at Ripley.

REVISED RECORDS.--WSP 975: 1936. WSP 1208: 1925, 1929, 1933. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 431.1 ft above National Geodetic Vertical Datum of 1929. Prior to July 28, 1926, nonrecording gage at site 200 ft upstream at datum 0.02 ft higher. July 28, 1926, to Jan. 11, 1935, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--68 years, 804 ft^3/s, 8.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s, Mar. 7, 1985, gage height, 29.07 ft; no flow for part of Sept. 26, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 9	0330	*1,800	*12.76				

No flow for part of Sept. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.8	32	e15	25	e10	51	235	64	95	48	43
2	11	7.3	26	e14	22	e12	55	149	56	52	27	21
3	8.8	6.4	22	e13	20	24	226	110	37	34	19	12
4	8.5	6.6	e15	e12	16	166	430	83	42	24	16	6.9
5	8.4	6.9	e13	e11	e11	148	302	73	53	19	13	5.5
6	7.7	7.0	e11	e10	e7.0	149	211	62	37	18	11	4.4
7	8.9	7.2	e9.0	e13	e7.4	165	138	55	31	19	11	3.5
8	10	7.8	e8.0	e14	e8.2	213	122	48	21	18	11	412
9	9.3	9.5	e7.0	e16	e8.0	182	123	53	17	18	10	1110
10	7.9	23	e6.2	e19	e7.8	135	103	151	15	18	9.2	181
11	7.0	16	e5.4	e22	e7.4	107	93	227	14	20	7.9	208
12	6.7	16	e6.2	e23	e7.0	95	76	187	16	21	7.8	73
13	6.3	15	e6.8	e20	e6.6	90	63	100	16	21	7.4	33
14	6.9	18	e6.0	e18	e6.3	88	56	68	28	15	8.1	18
15	7.9	43	e5.4	e17	e6.8	81	51	52	221	14	8.2	11
16	8.7	64	e5.0	e15	e8.0	72	45	41	155	15	8.2	7.0
17	8.3	31	e4.6	e14	e8.8	61	41	33	80	13	7.2	4.7
18	8.1	24	e4.5	e13	e9.0	49	37	28	53	13	6.8	3.7
19	8.4	26	e5.6	e12	e8.6	40	35	31	37	15	5.9	5.2
20	6.2	22	e7.2	e11	e8.2	36	33	33	31	20	5.4	4.3
21	4.4	22	12	e10	e8.0	32	31	28	25	29	5.2	2.8
22	3.9	22	15	e11	e7.8	29	30	34	21	61	5.8	1.5
23	4.5	20	25	e12	e8.0	26	37	58	18	48	5.8	1.6
24	4.7	18	21	e13	e8.8	23	42	41	16	31	5.7	1.8
25	4.8	17	17	e14	e10	22	44	55	15	35	48	.96
26	4.8	39	e13	e15	e9.2	20	49	228	14	41	35	1.2
27	4.7	31	e11	e16	e9.0	19	137	99	171	49	24	3.3
28	5.2	22	e9.5	e18	e8.9	47	713	79	734	40	15	2.5
29	5.6	18	e10	e19	---	109	932	183	303	46	170	2.5
30	6.0	20	e12	e21	---	64	378	119	182	38	183	3.0
31	6.9	---	e14	25	---	58	---	70	---	55	107	---
TOTAL	221.5	593.5	365.4	476	278.8	2372	4684	2813	2523	955	852.6	2188.36
MEAN	7.15	19.8	11.8	15.4	9.96	76.5	156	90.7	84.1	30.8	27.5	72.9
MAX	11	64	32	25	25	213	932	235	734	95	183	1110
MIN	3.9	6.4	4.5	10	6.3	10	30	28	14	13	5.2	.96
CFSM	.01	.02	.01	.01	.01	.06	.12	.07	.07	.02	.02	.06
IN.	.01	.02	.01	.01	.01	.07	.13	.08	.07	.03	.02	.06

CAL YR 1988 TOTAL 60933.5 MEAN 166 MAX 3610 MIN 1.6 CFSM .13 IN. 1.75
WTR YR 1989 TOTAL 18323.16 MEAN 50.2 MAX 1110 MIN .96 CFSM .04 IN. .53

e Estimated

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT 28...	0900	17002	17002	5.2	592	7.10	6.5	8.9	7.9	18	K35
DEC 05...	0930	17002	17002	13	718	6.80	2.0	6.3	11.4	14	K14
JAN 18...	0930	17002	17002	13	782	7.30	0.5	7.8	14.7	11	K10
FEB 23...	1000	17002	17002	8.0	854	7.20	0.0	6.4	16.5	12	K4
MAR 28...	0930	17002	17002	27	599	7.70	15.5	9.1	7.9	26	K180
APR 27...	0930	17002	17002	90	813	7.60	20.5	5.3	6.9	29	K35
JUN 22...	0930	17002	17002	22	460	7.40	25.0	10	5.0	27	K50
AUG 10...	1000	17002	17002	9.2	473	7.00	22.0	--	2.1	33	K260
SEP 19...	1130	17002	17002	2.7	411	7.10	18.0	12	9.5	21	1300

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CACO3) (90410)
OCT 28...	280	36	70	70	25	25	24	24	2.8	2.8	242
DEC 05...	260	66	64	63	25	24	55	54	5.8	5.7	191
JAN 18...	240	62	59	58	23	23	65	65	3.5	3.5	178
FEB 23...	280	84	70	69	26	26	75	73	4.9	4.8	196
MAR 28...	230	68	58	58	20	20	32	32	4.7	4.6	160
APR 27...	330	120	110	84	45	29	300	47	7.1	5.5	206
JUN 22...	180	33	47	46	15	15	24	24	5.8	5.7	144
AUG 10...	180	23	49	49	15	15	23	23	7.6	7.1	162
SEP 19...	150	29	41	40	13	12	22	22	6.0	6.0	121

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 28...	48	24	0.2	340	8	4	0.170	<0.100	<0.001	--	0.80
DEC 05...	98	--	0.3	--	5	2	1.10	0.170	<0.001	0.43	0.60
JAN 18...	130	70	0.3	462	5	3	0.380	<0.100	--	--	0.50
FEB 23...	140	75	0.3	505	6	2	1.00	<0.100	<0.001	--	0.60
MAR 28...	110	36	0.2	355	58	8	<0.100	<0.100	<0.001	--	1.2
APR 27...	160	48	0.3	498	46	5	<0.100	<0.100	<0.002	--	1.8
JUN 22...	52	24	0.3	254	109	18	1.50	0.160	0.002	1.6	1.8
AUG 10...	52	20	0.3	264	56	14	<0.100	<0.100	<0.001	--	1.3
SEP 19...	44	23	0.3	220	57	9	0.680	<0.100	<0.001	--	0.50

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT 28...	0.97	0.080	0.050	150	<50	<1	100	120	<0.5	<0.5
DEC 05...	1.7	0.080	<0.010	150	<50	1	90	83	<0.5	<0.5
JAN 18...	0.88	0.090	0.010	110	<50	<1	80	69	<0.5	<0.5
FEB 23...	1.6	0.100	0.010	100	60	1	70	67	<0.5	<0.5
MAR 28...	--	0.170	0.030	1000	60	1	100	110	<0.5	<0.5
APR 27...	--	0.180	0.030	330	140	3	90	--	<0.5	<0.5
JUN 22...	3.3	0.230	0.040	2600	170	2	200	120	<1.0	<0.5
AUG 10...	--	0.130	0.030	1400	60	3	200	130	<0.5	<0.5
SEP 19...	1.2	0.120	0.040	2000	80	2	100	100	<0.5	<0.5

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 28...	<50	<50	<3	<3	<5	<5	<5	<5	<5	<5
DEC 05...	150	140	<3	<3	<5	<5	<5	<5	<5	<5
JAN 18...	160	150	<3	<3	<5	<5	<5	<5	<5	<5
FEB 23...	180	180	<3	<3	<5	<5	<5	<5	<5	<5
MAR 28...	100	100	<3	<3	<5	<5	<5	<5	<5	<5
APR 27...	160	130	--	--	5	<5	<5	<5	<5	<5
JUN 22...	90	90	<3	<3	<5	<5	<5	<5	5	<5
AUG 10...	80	80	<3	<3	6	<5	<5	<5	<5	<5
SEP 19...	70	60	<3	<3	<5	<5	<5	<5	<5	8

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT 28...	440	110	<5	<5	470	440	<0.05	<5	<5	<3
DEC 05...	830	<50	<5	<5	430	410	0.05	<5	<5	<3
JAN 18...	1100	100	6	<5	370	350	<0.05	<5	<5	<3
FEB 23...	1800	59	<5	<5	710	680	<0.05	5	6	<3
MAR 28...	2200	52	<5	<5	1400	1200	<0.05	<5	<5	<3
APR 27...	260	<50	<5	<5	260	--	<0.05	<5	<5	<3
JUN 22...	3300	<50	6	<5	790	560	<0.05	8	5	<3
AUG 10...	2000	<50	8	<5	1100	790	<0.05	10	7	<3
SEP 19...	2700	<50	<5	<5	490	380	<0.05	6	<5	<3

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 28...	<3.0	170	170	<10	<10	<50	<50	<0.005	<5	1
DEC 05...	<3.0	180	180	<5	<5	<50	<50	<0.005	<5	1
JAN 18...	<3.0	240	230	<5	<5	<50	<50	<0.005	<5	1
FEB 23...	<3.0	250	240	<5	<5	<50	<50	<0.005	<5	--
MAR 28...	<3.0	200	200	<5	<5	<50	<50	<0.005	<5	1
APR 27...	<3.0	190	--	<5	<5	<50	<50	<0.005	<5	<1
JUN 22...	<3.0	140	140	8	<5	<50	<50	0.005	<5	<1
AUG 10...	<5.0	150	150	9	6	<50	<50	<0.005	<5	--
SEP 19...	<3.0	120	120	<5	<5	<50	<50	<0.005	<5	--

05585275 INDIAN CREEK AT ARENZVILLE, IL

LOCATION.--Lat 39°52'40", long 90°22'38", in SW1/4SE1/4 sec.31, T.17 N., R.11 W., Cass County, Hydrologic Unit 07130011, at bridge on county road 0.3 mi west of Arenzville, 2.9 mi upstream from Prairie Creek, 3.6 mi downstream from Little Indian Creek, and at mile 11.1.

DRAINAGE AREA.--164 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 28...	1200	17002	17002	0.70	778	7.00	8.0	7.9	8.1	29	440
DEC 05...	1100	17002	17002	6.6	741	7.30	3.0	8.7	13.3	24	K20
JAN 18...	1115	17002	17002	7.0	631	7.40	2.5	6.6	13.1	10	K10
FEB 23...	1200	17002	17002	10	668	8.20	0.5	5.1	22.1	19	<5
MAR 28...	1100	17002	17002	24	619	7.90	18.0	6.0	9.3	23	K170
APR 27...	1100	17002	17002	137	618	7.60	20.5	6.6	6.4	46	>20000
JUN 22...	1100	17002	17002	35	716	8.10	25.0	1.9	8.2	12	K400
AUG 10...	1100	17002	17002	0.10	695	7.90	23.0	2.6	10.9	22	K160
SEP 20...	1300	17002	17002	2.5	682	7.70	21.0	5.4	10.3	22	K120

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT 28...	360	360	71	70	46	46	35	35	5.4	5.3
DEC 05...	340	340	71	71	39	39	36	37	5.6	5.7
JAN 18...	310	310	69	66	35	34	15	15	2.7	2.7
FEB 23...	360	360	72	72	44	44	17	17	3.6	3.6
MAR 28...	310	310	61	61	39	38	14	13	4.3	4.1
APR 27...	310	310	70	62	41	38	12	12	8.0	6.9
JUN 22...	380	380	79	78	46	45	10	10	1.2	1.3
AUG 10...	300	300	63	62	36	36	35	35	7.6	7.7
SEP 20...	330	330	72	73	34	35	24	25	8.8	8.5

05585275 INDIAN CREEK AT ARENZVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
OCT 28...	8	4	0.550	<0.100	<0.001	0.530	0.390	240	<50	100
DEC 05...	6	3	0.920	0.290	<0.001	0.600	0.480	350	<50	100
JAN 18...	6	1	0.400	0.360	<0.001	0.110	0.040	240	50	100
FEB 23...	10	3	1.20	<0.100	<0.001	0.100	0.020	180	70	90
MAR 28...	37	4	<0.100	0.140	0.004	0.130	0.060	820	80	100
APR 27...	255	25	0.440	0.430	0.007	0.540	0.230	6600	110	200
JUN 22...	5	2	8.00	<0.100	<0.007	0.120	0.060	1100	250	100
AUG 10...	22	4	0.260	<0.100	<0.004	0.440	0.320	720	60	100
SEP 20...	15	4	1.00	0.320	0.007	0.380	0.510	500	70	100

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT 28...	99	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
DEC 05...	87	<0.5	<0.5	100	100	<3	<3	<5	<5	<5
JAN 18...	110	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
FEB 23...	81	<0.5	<0.5	<50	<50	<3	<3	<5	6	<5
MAR 28...	120	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
APR 27...	100	<0.5	<0.5	<50	<50	--	--	13	5	7
JUN 22...	120	<1.0	<1	<50	<50	<3	<3	8	<5	<5
AUG 10...	110	<0.5	<0.5	100	--	<3	<3	6	5	<5
SEP 20...	140	<0.5	<0.5	90	90	<3	<3	<5	<5	<5

05585275 INDIAN CREEK AT ARENZVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT 28...	<5	<5	<5	750	140	<5	<5	540	460	<0.05
DEC 05...	<5	<5	<5	760	<50	<5	<5	950	900	<0.05
JAN 18...	<5	<5	<5	1000	96	<5	<5	1300	1200	<0.05
FEB 23...	<5	<5	<5	900	92	<5	<5	730	680	<0.05
MAR 28...	<5	<5	<5	1500	70	5	<5	1000	920	<0.05
APR 27...	<5	13	<5	10000	<50	10	<5	1400	560	<0.05
JUN 22...	<5	8	<5	1200	<50	<5	<5	120	42	<0.05
AUG 10...	<5	7	<5	890	<50	<5	<5	390	240	<0.05
SEP 20...	<5	<5	<5	700	<50	<5	<5	390	330	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 28...	<5	<5	<3	<3.0	180	180	58	47	<100	<100
DEC 05...	<5	<5	<3	<3.0	150	150	<5	<5	<50	<50
JAN 18...	<5	<5	<3	<3.0	160	150	<5	<5	<50	<50
FEB 23...	8	6	<3	<3.0	150	160	<5	<5	<50	<50
MAR 28...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50
APR 27...	18	<5	<3	<3.0	140	130	18	<5	<50	<50
JUN 22...	10	5	<3	<3.0	170	170	7	<5	<100	<50
AUG 10...	10	8	<3	<3.0	160	160	9	8	<100	<100
SEP 20...	<5	<5	<3	<3.0	160	160	<5	<5	<50	<50

05585500 ILLINOIS RIVER AT MEREDOSIA, IL

LOCATION.--Lat 39°49'24", long 90°34'05", in SE1/4 sec.21, T.16 N., R.13 W., Morgan County, Hydrologic Unit 07130011 on left bank in the crib house of Central Illinois Public Service Company in Meredosia, 0.6 mi downstream from bridge on State Highway 104, 3.9 mi upstream from McKee Creek, and at mile 71.3.

DRAINAGE AREA.--26,028 mi^2.

PERIOD OF RECORD.--October 1938 to September 1988 (discontinued) . October 1933 to September 1938 in reports of Mississippi River Commission.

REVISED RECORDS.--WSP 895: 1939. WDR IL-75-1: Drainage area. WDR IL-83-2: 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 418.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Sept. 19, 1962, and Oct. 1, 1985, to June 12, 1986, water-stage recorder at site 0.3 mi upstream at same datum. Since Nov. 11, 1938, auxiliary water-stage recorder at Norfolk & Southern Railroad bridge, 0.4 mi southeast of Valley City, 9.5 mi downstream, and at mile 61.3.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation at low flow by navigation dam at La Grange. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at site and at auxiliary site 9.5 mi downstream.

AVERAGE DISCHARGE.--51 years, 21,895 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 123,000 ft^3/s, May 26-28, 1943; maximum gage height, 28.61 ft, May 26, 1943; minimum daily discharge, 1,330 ft^3/s, Sept. 2, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,800 ft^3/s, Sept. 18; maximum gage height, 10.80 ft, Sept. 18; minimum daily discharge, 4,700 ft^3/s, Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6700	5720	10700	13400	e8780	e7700	12900	14700	19600	8110	9980	8080
2	6970	6770	11100	13900	e9010	e7600	12900	14200	22300	8330	9530	9740
3	7130	6370	11300	13200	e9420	e7600	12900	14700	24500	7950	10400	16500
4	5270	5310	10200	13000	e9230	e7500	13700	14500	24500	8670	9410	20400
5	5290	5240	9830	11900	e9440	e8500	14600	13000	25300	9220	9410	20100
6	e5000	8930	9040	11500	e7490	e10300	16500	12100	26200	9280	8910	19900
7	4700	8970	10200	11600	e6140	e12000	17400	12000	26100	7640	9070	17400
8	4940	6590	9700	12100	e6070	e13000	19900	11800	26300	7130	9860	22500
9	5420	8310	10000	11400	e6900	e13900	21100	11200	25900	7380	10600	26100
10	e5500	5990	7750	11600	e7380	e14600	21600	8710	25900	7060	10600	26800
11	5540	8080	6590	12100	e5990	e14700	21100	8970	24800	6650	10900	28200
12	5540	11700	8920	12400	e6390	e14800	21900	7950	24400	5870	7080	29200
13	e5200	9940	8920	13600	e6990	e14900	19300	7780	24800	6970	10100	30100
14	7110	10100	6930	16900	e6820	15300	16700	8450	23000	5920	7920	31000
15	8930	12100	7430	22100	e7960	14600	16000	8060	22300	6710	9320	31600
16	8520	14400	6220	20500	e8220	15000	14600	7180	21500	5740	8530	32600
17	9010	13900	9210	19100	e6960	14700	14400	9120	19400	5360	7300	32600
18	8160	15300	6130	16000	e6770	14900	13200	8560	15800	5540	6320	32800
19	6650	14300	5940	13900	e6320	14700	12900	9280	12800	5430	5640	32700
20	e8000	13900	8080	7250	e6640	14400	12500	7490	12300	7250	5410	32300
21	7620	16300	8250	7880	e6290	14400	11800	7600	12400	9160	5620	31800
22	6890	18000	7890	7080	e7160	14300	13100	7700	11800	11100	5780	30400
23	8180	14300	7750	6220	e7380	14400	11700	8960	11300	11300	5970	29200
24	6160	13100	7340	6310	e7890	14100	12200	10600	10300	12400	6000	28200
25	8820	13200	8030	7550	e9100	13100	12800	10800	9500	13300	6660	27400
26	7520	12000	8180	7400	e7800	14500	13200	13700	9160	12900	7620	26000
27	5100	8710	8910	8060	e7700	14300	14500	15000	e9160	12700	6840	24700
28	5800	7560	10800	8320	e8000	14000	14100	15600	9170	11900	7300	23400
29	5980	12200	12400	8140	---	13400	14300	16900	8600	10900	9370	20400
30	6430	10200	11000	8610	---	e13500	15100	18000	8580	10800	7750	15800
31	5490	---	13900	8810	---	13900	---	17900	---	11000	7530	---
TOTAL	203570	317490	278640	361830	210240	404600	458900	352510	547670	269670	252730	757920
MEAN	6567	10580	8988	11670	7509	13050	15300	11370	18260	8699	8153	25260
MAX	9010	18000	13900	22100	9440	15300	21900	18000	26300	13300	10900	32800
MIN	4700	5240	5940	6220	5990	7500	11700	7180	8580	5360	5410	8080

CAL YR 1988 TOTAL 5243630 MEAN 14330 MAX 40100 MIN 4170
WTR YR 1989 TOTAL 4415770 MEAN 12100 MAX 32800 MIN 4700

e Estimated

05586040 MAUVAISE TERRE CREEK NEAR MERRITT, IL

LOCATION.--Lat 39°43'53", long 90°24'26", in NW1/4SW1/4 sec.23, T.15 N., R.12 W., Scott County, Hydrologic Unit 07130011, at bridge on county road, 0.5 mi downstream from Willow Branch, 1.3 mi northeast of Merritt, 3.2 mi south of State Highway 104 at Chapin, and at mile 19.4.

DRAINAGE AREA.--146 mi^2.

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV											
07...	1215	17002	17002	7.1	1190	6.90	4.5	--	8.8	38	K80
DEC											
05...	1200	17002	17002	6.5	693	7.50	1.0	6.8	14.1	18	K55
JAN											
18...	1215	17002	17002	11	1020	7.80	2.0	4.0	14.3	18	K30
FEB											
23...	1350	17002	17002	21	967	8.10	0.0	3.9	17.1	20	K2
MAR											
28...	1215	17002	17002	20	772	7.70	18.0	7.8	8.6	22	K4200
APR											
27...	1215	17002	17002	22	664	7.30	21.5	160	5.3	51	>20000
JUN											
22...	1215	17002	17002	15	834	7.70	25.0	2.6	6.8	13	K650
AUG											
10...	1200	17002	17002	10	1060	7.50	22.0	11	8.4	25	620
SEP											
20...	1415	17002	17002	2.8	770	7.10	17.5	6.0	7.5	18	580

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
NOV											
07...	250	250	47	46	33	33	150	150	13	13	5
DEC											
05...	190	190	41	41	22	22	74	75	6.5	6.5	5
JAN											
18...	250	250	53	52	31	30	100	100	6.6	6.7	5
FEB											
23...	250	250	54	52	31	30	100	100	7.6	7.4	6
MAR											
28...	280	280	60	58	32	32	53	53	5.4	5.0	43
APR											
27...	250	250	55	52	31	28	38	38	9.3	7.8	178
JUN											
22...	330	330	70	70	39	38	50	50	4.7	3.9	35
AUG											
10...	230	230	48	47	29	28	130	130	11	11	63
SEP											
20...	190	190	40	39	23	23	86	85	7.9	7.6	44

05586040 MAUVAISE TERRE CREEK NEAR MERRITT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)
NOV										
07...	2	11.0	<0.100	<0.001	7.80	7.70	590	<50	30	27
DEC										
05...	2	3.80	<0.100	<0.001	3.20	2.40	390	<50	20	14
JAN										
18...	2	6.00	0.820	0.005	4.20	3.70	260	50	40	33
FEB										
23...	2	1.80	3.10	0.034	3.10	3.00	250	60	30	22
MAR										
28...	5	2.40	0.410	0.007	1.60	1.40	1300	180	70	67
APR										
27...	18	3.40	1.10	0.010	1.80	1.30	8400	100	200	60
JUN										
22...	4	7.30	<0.100	<0.003	1.43	1.20	2600	250	100	87
AUG										
10...	9	4.50	0.110	0.002	3.00	2.90	1200	50	80	69
SEP										
20...	5	2.90	0.130	<0.001	2.70	2.40	1400	100	70	54

DATE	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)
NOV										
07...	<0.5	<0.5	240	230	<3	<3	<5	<5	<5	<5
DEC										
05...	<0.5	<0.5	160	160	<3	<3	<5	<5	<5	<5
JAN										
18...	<0.5	<0.5	170	170	<3	<3	<5	<5	<5	<5
FEB										
23...	<0.5	<0.5	160	150	<3	<3	5	<5	<5	<5
MAR										
28...	<0.5	<0.5	120	120	<3	<3	5	<5	<5	5
APR										
27...	<0.5	<0.5	110	110	--	--	12	<5	5	<5
JUN										
22...	<2.0	<1	100	100	<3	<3	9	<5	7	<5
AUG										
10...	<0.5	<0.5	230	230	<3	<3	<5	<5	<5	6
SEP										
20...	<0.5	<0.5	200	190	<3	<3	<5	<5	<5	<5

05586040 MAUVAISE TERRE CREEK NEAR MERRITT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
NOV 07...	<5	<5	890	220	7	6	170	160	<0.05	53
DEC 05...	<5	<5	570	<50	<5	7	40	39	0.05	16
JAN 18...	<5	<5	520	55	6	<5	70	62	<0.05	27
FEB 23...	<5	<5	460	<50	<5	<5	100	97	<0.05	21
MAR 28...	<5	<5	1700	80	6	<5	400	360	<0.05	15
APR 27...	13	<5	11000	<50	12	<5	720	310	<0.05	17
JUN 22...	5	<5	2800	<50	<5	<5	210	130	<0.05	26
AUG 10...	<5	<5	1300	<50	<5	<5	250	200	<0.05	59
SEP 20...	<5	<5	1500	56	<5	<5	200	170	<0.05	30

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 07...	49	<3	<3.0	80	81	7	<5	190	110	17
DEC 05...	14	<3	<3.0	70	74	<5	<5	<100	<100	8.2
JAN 18...	26	<3	<3.0	120	120	<5	<5	<100	<100	9.6
FEB 23...	22	<3	<3.0	110	110	<5	<5	<100	<100	9.3
MAR 28...	14	<3	<3.0	150	140	6	6	<50	<50	8.9
APR 27...	6	<3	<3.0	120	110	20	<5	<100	<100	19
JUN 22...	21	<3	<3.0	140	140	14	8	<50	<50	--
AUG 10...	60	<3	<3.0	100	98	13	12	<100	<100	9.9
SEP 20...	24	<3	<3.0	80	79	7	6	<100	<100	8.3

05586100 ILLINOIS RIVER AT VALLEY CITY, IL

LOCATION.--Lat 39°42'10", long 90°38'40", in SW1/4NW1/4 sec.34, T.15 N., R.14 W., Pike County, Hydrologic Unit 07130011, 9.5 mi downstream from discharge station at Meredosia, on Norfolk & Western Railroad bridge, at Flints Creek, 0.5 mi east of Valley City, 1.8 mi downstream from Mauvaise Terre Creek, and at mile 61.3.

DRAINAGE AREA.--26,742 mi^2.

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1980 to current year.

REMARKS.--Records of discharge are given for Illinois River at Meredosia (station 05585500). Suspended-sediment samples were collected by a local observer once weekly with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,720 mg/L, Apr. 14, 1981; minimum daily mean, 14 mg/L, Dec. 26, 1984.
SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 507 mg/L, May 29; minimum daily mean, 22 mg/L, June 30.
SEDIMENT LOADS: Maximum daily, 24,300 tons, May. 30; minimum daily, 347 tons, October 31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
19...	1605	81700	1028	7500	--	--	--	--	--	--	--
26...	0930	17002	17002	7520	667	8.00	11.5	8.4	10.3	24	K50
DEC											
01...	0930	17002	17002	10700	746	7.30	5.0	21	10.8	26	130
20...	1100	81700	1028	8980	--	--	--	--	--	--	--
JAN											
05...	1000	17002	17002	11900	851	7.70	1.5	27	13.4	22	100
FEB											
14...	0930	17002	17002	6820	897	7.80	0.5	44	12.2	23	K10
MAR											
08...	1653	81700	1028	12900	--	--	--	--	--	--	--
23...	0930	17002	17002	14400	914	7.80	6.0	--	10.0	20	K10
APR											
24...	0930	17002	17002	12200	784	8.00	15.0	11	8.1	22	<20
JUN											
01...	0930	17002	17002	19600	701	7.90	23.0	37	--	32	K250
07...	1400	81700	1028	26100	--	--	24.0	--	--	--	--
AUG											
08...	0930	17002	17002	9860	713	7.60	25.5	23	6.2	22	K40
SEP											
07...	1100	17002	17002	17400	582	7.30	25.0	64	5.3	26	K150
20...	1700	81700	1028	33100	--	--	20.0	--	--	--	--

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	240	74	57	55	24	24	50	50	4.3	4.0	163
DEC											
01...	290	120	73	70	29	28	44	43	4.8	4.2	168
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
05...	310	120	79	76	29	28	55	54	4.5	3.9	189
FEB											
14...	330	120	85	81	31	30	52	51	4.5	4.0	203
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
23...	310	130	78	75	31	30	70	70	3.7	3.4	183
APR											
24...	330	140	80	79	33	32	36	36	3.3	3.3	190
JUN											
01...	290	120	72	67	29	30	36	37	4.6	3.1	167
07...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	260	89	64	61	26	25	47	45	3.5	3.7	167
SEP											
07...	210	81	57	50	23	21	39	39	3.9	2.8	131
20...	--	--	--	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	79	63	0.5	373	42	9	1.90	<0.100	<0.002	--	1.5
DEC											
01...	100	60	0.3	411	118	14	4.00	0.380	0.001	1.1	1.5
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
05...	120	80	0.4	474	60	8	4.40	0.380	0.002	1.2	1.6
FEB											
14...	120	77	0.4	489	42	6	5.70	0.600	0.003	1.2	1.8
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
23...	95	110	0.3	494	31	5	6.30	0.720	0.006	1.2	1.9
APR											
24...	100	64	0.3	434	17	2	7.20	0.210	0.006	2.1	2.3
JUN											
01...	75	55	0.4	368	249	21	6.10	<0.100	<0.004	--	2.1
07...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	84	65	0.4	384	103	13	3.30	0.250	0.006	0.75	1.0
SEP											
07...	66	49	0.4	307	240	24	2.50	0.140	0.002	1.3	1.4
20...	--	--	--	--	--	--	--	--	--	--	--

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	3.4	0.270	0.120	1000	<50	4	50	35	<0.5	<0.5	160
DEC											
01...	5.5	0.390	0.210	2700	<50	2	60	40	<0.5	<0.5	130
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
05...	6.0	0.480	0.340	2300	220	2	60	42	<0.5	<0.5	160
FEB											
14...	7.5	0.430	0.240	2300	<50	2	60	44	<0.5	<0.5	150
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
23...	8.2	0.330	0.200	1900	130	2	60	45	<0.5	<0.5	120
APR											
24...	9.5	0.210	0.120	1100	140	1	60	48	<0.5	<0.5	90
JUN											
01...	8.2	0.430	0.140	5500	300	4	100	69	<0.5	<2	120
07...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	4.3	0.327	0.186	1500	60	3	70	54	<0.5	<0.5	140
SEP											
07...	3.9	0.340	0.160	3600	<50	3	90	46	<0.5	<0.5	130
20...	--	--	--	--	--	--	--	--	--	--	--

DATE	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	160	<3	<3	<5	<5	<5	<5	<5	<5	1800	<50
DEC											
01...	130	<3	<3	9	<5	<5	<5	6	<5	3900	<50
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
05...	150	<3	<3	9	<5	<5	<5	6	<5	3300	100
FEB											
14...	140	<3	<3	9	5	<5	<5	7	<5	3400	<50
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
23...	110	<3	<3	9	<5	<5	<5	5	<5	2600	<50
APR											
24...	90	--	--	17	6	<5	<5	<5	<5	1700	<50
JUN											
01...	110	<3	<3	<5	<5	<5	<5	11	<5	7300	170
07...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	130	<3	<3	<5	<5	<5	<5	5	<5	2300	<50
SEP											
07...	120	<3	<3	6	<5	<5	<5	9	<5	6500	<50
20...	--	--	--	--	--	--	--	--	--	--	--

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
26...	<5	<5	120	<5	<0.05	20	15	<3	<3.0	240	240
DEC											
01...	8	<5	120	<5	<0.05	7	<5	<3	<3.0	280	270
20...	--	--	--	--	--	--	--	--	--	--	--
JAN											
05...	8	<5	100	23	0.94	15	10	<3	<3.0	290	280
FEB											
14...	5	<5	120	13	<0.05	16	12	<3	<3.0	270	260
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
23...	<5	<5	94	<5	<0.05	9	<5	<3	<3.0	270	270
APR											
24...	<5	<5	110	<5	0.06	22	6	<3	<3.0	230	230
JUN											
01...	8	<5	360	30	<0.05	10	6	<3	<3.0	210	200
07...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	<5	<5	130	5	<0.05	6	7	<3	<3.0	240	230
SEP											
07...	12	<5	290	<5	<0.05	16	<5	<3	<3.0	220	200
20...	--	--	--	--	--	--	--	--	--	--	--

DATE	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
19...	--	--	--	--	--	--	--	--	46	931	98
26...	<10	<10	<50	<50	7.1	<0.005	<5	2	--	--	--
DEC											
01...	6	<5	<100	<100	8.7	<0.005	170	1	--	--	--
20...	--	--	--	--	--	--	--	--	116	2810	99
JAN											
05...	<5	<5	<100	<100	7.9	<0.005	<5	1	--	--	--
FEB											
14...	6	<5	<100	<100	7.6	<0.005	<5	<1	--	--	--
MAR											
08...	--	--	--	--	--	--	--	--	98	3410	100
23...	5	<5	<50	<50	8.5	0.005	<5	<1	--	--	--
APR											
24...	<5	<5	<50	<50	7.1	<0.005	<5	<1	--	--	--
JUN											
01...	15	<5	<50	<50	8.3	<0.005	<5	2	--	--	--
07...	--	--	--	--	--	--	--	--	323	26700	97
AUG											
08...	<5	<5	<50	<50	7.6	<0.005	<5	--	--	--	--
SEP											
07...	8	<5	250	<100	8.0	<0.005	<5	--	--	--	--
20...	--	--	--	--	--	--	--	--	144	12900	94

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	6700	55	991	5720	24	370	10700	143	4120
2	6970	57	1080	6770	25	449	11100	148	4420
3	7130	54	1040	6370	25	433	11300	153	4650
4	5270	40	564	5310	26	371	10200	158	4340
5	5280	41	585	5240	27	375	9830	161	4260
6	5000	42	567	8930	27	656	9040	156	3800
7	4700	41	522	8970	28	679	10200	151	4150
8	4940	38	513	6590	29	519	9700	146	3820
9	5420	27	394	8310	30	683	10000	141	3810
10	5500	27	406	5990	35	560	7750	136	2850
11	5540	28	424	8080	51	1120	6590	132	2350
12	5540	27	404	11700	77	2420	8920	128	3070
13	5200	25	357	9940	102	2730	8920	124	2990
14	7110	26	491	10100	101	2740	6930	123	2300
15	8930	25	609	12100	97	3180	7430	122	2440
16	8520	29	664	14400	94	3660	6220	120	2020
17	9010	32	772	13900	91	3420	9210	119	2970
18	8160	36	789	15300	94	3900	6130	118	1950
19	6650	41	744	14300	120	4650	5940	117	1880
20	8000	36	772	13900	155	5820	8080	123	2690
21	7620	27	558	16300	184	8100	8250	160	3570
22	6890	25	472	18000	177	8590	7890	172	3670
23	8180	26	582	14300	167	6460	7750	183	3820
24	6160	28	459	13100	158	5600	7340	194	3840
25	8820	28	671	13200	150	5340	8030	205	4450
26	7520	27	555	12000	142	4590	8180	213	4710
27	5100	26	364	8710	134	3160	8910	207	4990
28	5800	26	400	7560	130	2650	10800	201	5860
29	5980	25	399	12200	134	4400	12400	194	6510
30	6430	24	415	10200	138	3800	11000	188	5590
31	5490	23	347	---	---	---	13900	182	6840
TOTAL	203570	---	17910	317490	---	91425	278640	---	118730

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	13400	177	6390	8780	60	1410	7700	100	2090
2	13900	170	6390	9010	60	1450	7600	92	1880
3	13200	162	5780	9420	60	1520	7600	83	1710
4	13000	154	5420	9230	60	1480	7500	76	1540
5	11900	147	4720	9440	60	1520	8500	69	1590
6	11500	140	4340	7490	60	1210	10300	66	1850
7	11600	133	4160	6140	61	1010	12000	74	2390
8	12100	126	4130	6070	62	1020	13000	87	3050
9	11400	119	3670	6900	63	1180	13900	77	2910
10	11600	110	3440	7380	65	1290	14600	81	3190
11	12100	101	3300	5990	66	1060	14700	78	3110
12	12400	93	3110	6390	67	1160	14800	83	3300
13	13600	85	3100	6990	68	1290	14900	96	3860
14	16900	72	3270	6820	68	1260	15300	83	3440
15	22100	60	3560	7960	69	1470	14600	79	3100
16	20500	51	2850	8220	69	1530	15000	75	3020
17	19100	50	2590	6960	69	1300	14700	71	2810
18	16000	49	2130	6770	69	1260	14900	67	2710
19	13900	49	1830	6320	69	1180	14700	64	2540
20	7250	48	939	6640	71	1270	14400	63	2450
21	7880	47	1010	6290	77	1300	14400	68	2660
22	7080	47	890	7160	83	1610	14300	74	2860
23	6220	46	780	7380	90	1800	14400	75	2930
24	6310	48	819	7890	96	2080	14100	76	2880
25	7550	50	1020	9100	106	2600	13100	76	2690
26	7400	52	1040	7800	115	2420	14500	77	3000
27	8060	54	1170	7700	120	2490	14300	81	3140
28	8320	56	1250	8000	110	2360	14000	101	3810
29	8140	58	1270	---	---	---	13400	126	4560
30	8610	60	1390	---	---	---	13500	158	5740
31	8810	60	1420	---	---	---	13900	197	7390
TOTAL	361830	---	87178	210240	---	42550	404600	---	94200

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	12900	231	8050	14700	374	14800	19600	388	20500
2	12900	234	8140	14200	367	14100	22300	345	20800
3	12900	233	8110	14700	356	14100	24500	323	21300
4	13700	207	7660	14500	345	13500	24500	313	20700
5	14600	191	7550	13000	334	11700	25300	331	22600
6	16500	204	9100	12100	324	10600	26200	328	23200
7	17400	220	10300	12000	314	10200	26100	335	23600
8	19900	235	12600	11800	304	9670	26300	333	23700
9	21100	247	14100	11200	294	8880	25900	303	21200
10	21600	260	15200	8710	284	6680	25900	272	19000
11	21100	210	12000	8970	275	6660	24800	244	16400
12	21900	133	7840	7950	266	5710	24400	224	14700
13	19300	96	5000	7780	257	5400	24800	219	14600
14	16700	69	3130	8450	251	5720	23000	215	13300
15	16000	50	2170	8060	250	5440	22300	211	12700
16	14600	36	1430	7180	250	4850	21500	207	12000
17	14400	29	1130	9120	250	6150	19400	204	10700
18	13200	33	1160	8560	250	5770	15800	200	8530
19	12900	37	1290	9280	250	6250	12800	186	6450
20	12500	42	1430	7490	249	5050	12300	149	4940
21	11800	48	1540	7600	249	5120	12400	117	3920
22	13100	55	1950	7700	251	5230	11800	92	2940
23	11700	63	1990	8960	260	6280	11300	73	2210
24	12200	74	2430	10600	286	8180	10300	57	1590
25	12800	94	3240	10800	381	11100	9500	45	1150
26	13200	120	4260	13700	484	17900	9160	36	892
27	14500	152	5970	15000	487	19700	9160	31	777
28	14100	194	7390	15600	496	20900	9170	27	681
29	14300	247	9550	16900	507	23100	8600	24	559
30	15100	315	12900	18000	500	24300	8580	22	508
31	---	---	---	17900	442	21400	---	---	---
TOTAL	458900	---	188610	352510	---	334440	547670	---	346147

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	8110	23	499	9980	130	3510	8080	201	4380
2	8330	24	539	9530	142	3650	9740	363	9550
3	7950	26	568	10400	155	4350	16500	269	12000
4	8670	34	785	9410	169	4300	20400	178	9800
5	9220	43	1060	9410	184	4690	20100	155	8390
6	9280	54	1350	8910	201	4840	19900	166	8900
7	7640	67	1390	9070	212	5190	17400	176	8270
8	7130	70	1350	9860	202	5390	22500	182	11000
9	7380	42	827	10600	192	5490	26100	194	13600
10	7060	34	648	10600	182	5210	26800	209	15100
11	6650	41	742	10900	173	5080	28200	179	13600
12	5870	42	662	7080	164	3130	29200	173	13600
13	6970	42	795	10100	155	4230	30100	172	14000
14	5920	43	682	7920	143	3050	31000	191	16000
15	6710	43	781	9320	130	3280	31600	208	17800
16	5740	44	676	8530	121	2780	32600	198	17400
17	5360	44	638	7300	112	2210	32600	223	19600
18	5540	45	666	6320	104	1780	32800	207	18300
19	5430	48	701	5640	97	1470	32700	200	17700
20	7250	73	1420	5410	90	1310	32300	162	14100
21	9160	114	2830	5620	86	1300	31800	133	11500
22	11100	141	4230	5780	91	1420	30400	121	9930
23	11300	121	3690	5970	97	1570	29200	110	8640
24	12400	103	3440	6000	104	1680	28200	99	7570
25	13300	88	3150	6660	111	1990	27400	91	6710
26	12900	78	2730	7620	118	2440	26000	86	6040
27	12700	84	2880	6840	126	2340	24700	82	5490
28	11900	92	2950	7300	135	2660	23400	79	4970
29	10900	100	2950	9370	145	3670	20400	75	4150
30	10800	109	3190	7750	156	3260	15800	72	3070
31	11000	119	3540	7530	168	3410	---	---	---
TOTAL	269670	---	52369	252730	---	100680	757920	---	331160
YEAR	4415770		1805399						

05586690 MACOUPIN CREEK NEAR MACOUPIN, IL

LOCATION.--Lat 39°12'04", long 89°58'45", in NW1/4NW1/4 sec.27, T.9 N., R.8 W., Macoupin County, Hydrologic Unit 07130012, at bridge on Macoupin-Plainview Road, 1.5 mi downstream from Dry Fork, 1.5 mi southwest of Macoupin, 10.4 mi upstream from Coop Branch, and at mile 52.5.

DRAINAGE AREA.--304 mi^2.

PERIOD OF RECORD.--Water years 1979 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DA 04.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
31...	0900	17002	17002	3.5	748	6.70	4.5	22	3.3	45	K75
DEC											
08...	0930	17002	17002	2.0	484	6.80	2.5	23	9.4	17	K75
JAN											
23...	1000	17002	17002	--	729	7.30	1.5	6.8	13.3	14	190
FEB											
28...	0930	17002	17002	--	648	7.50	0.5	27	13.3	22	K60
MAR											
30...	0915	17002	17002	63	686	7.50	12.0	13	9.0	19	120
MAY											
10...	1100	17002	17002	--	695	7.40	12.0	8.0	9.7	12	K280
JUN											
26...	1000	17002	17002	--	711	7.80	25.5	5.2	6.6	25	<50
AUG											
17...	0930	17002	17002	2.0	410	7.50	20.5	4.0	5.8	14	K40
SEP											
27...	1000	17002	17002	--	541	7.70	14.0	3.1	9.1	19	K120

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
OCT											
31...	230	22	57	57	21	21	73	74	9.3	9.3	207
DEC											
08...	180	63	47	46	17	16	27	26	5.8	5.5	118
JAN											
23...	290	110	69	70	27	27	36	36	5.0	5.3	180
FEB											
28...	280	130	69	68	27	27	30	30	4.6	4.4	155
MAR											
30...	310	130	73	73	30	30	26	26	4.2	4.0	178
MAY											
10...	320	120	77	77	31	31	25	25	3.0	2.9	197
JUN											
26...	320	89	80	81	29	29	31	31	4.7	4.7	233
AUG											
17...	170	27	45	44	14	14	17	16	7.8	--	141
SEP											
27...	220	58	58	58	19	19	24	25	7.3	7.1	166

05586690 MACOUPIN CREEK NEAR MACOUPIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)
OCT 31...	68	1	1	<0.100	<0.100	<0.001	0.340	0.250	160	<50	90
DEC 08...	76	10	3	1.20	0.470	<0.001	0.900	0.620	1100	60	70
JAN 23...	140	8	2	3.20	0.320	<0.001	0.650	0.540	240	80	70
FEB 28...	130	30	5	3.30	0.410	0.001	0.500	0.330	1200	60	80
MAR 30...	130	48	6	2.90	0.200	0.001	0.263	0.150	1000	120	100
MAY 10...	110	32	3	4.10	0.260	0.001	0.219	0.150	950	210	100
JUN 26...	76	25	7	1.20	<0.100	<0.005	0.230	0.120	510	190	100
AUG 17...	36	14	3	<0.100	<0.100	<0.001	0.200	0.150	230	<50	90
SEP 27...	76	6	2	1.30	<0.100	<0.001	0.217	0.170	390	70	100

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT 31...	90	<0.5	<0.5	160	--	<3	<3	<5	<5	<5	<5
DEC 08...	51	<0.5	<0.5	80	80	<3	<3	<5	<5	<5	<5
JAN 23...	64	<0.5	<0.5	70	70	<3	<3	<5	<5	<5	<5
FEB 28...	60	<0.5	<0.5	50	50	<3	<3	<5	<5	<5	<5
MAR 30...	92	<0.5	<0.5	50	50	<3	<3	8	6	<5	<5
MAY 10...	100	<0.5	<0.5	<50	<50	--	--	<5	<5	<5	<5
JUN 26...	120	<0.5	<0.5	60	--	<3	<3	<5	<5	<5	<5
AUG 17...	80	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5	<5
SEP 27...	98	<0.5	<0.5	70	70	<3	<3	<5	<5	<5	<5

05586690 MACOUPIN CREEK NEAR MACOUPIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
OCT 31...	<5	<5	500	250	<5	<5	970	960	<0.05	5
DEC 08...	<5	<5	1600	<50	<5	<5	450	410	<0.05	6
JAN 23...	7	--	490	<50	<5	<5	290	280	<0.05	<5
FEB 28...	<5	<5	1600	<50	<5	<5	230	200	<0.05	8
MAR 30...	<5	<5	1400	<50	<5	<5	250	190	<0.05	6
MAY 10...	<5	<5	1000	<50	<5	<5	360	320	<0.05	<5
JUN 26...	<5	<5	610	65	<5	<5	470	250	<0.05	<5
AUG 17...	<5	<5	440	<50	<5	<5	720	570	<0.05	<5
SEP 27...	<5	<5	540	<50	<5	<5	280	240	<0.05	9

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT 31...	<5	<3	<3.0	160	160	<10	<10	<100	<100	21
DEC 08...	5	<3	<3.0	130	130	<5	<5	<50	<50	10
JAN 23...	--	<3	<3.0	180	180	<5	<5	<100	<100	6.3
FEB 28...	5	<3	<3.0	170	170	<5	<5	<100	<100	10
MAR 30...	5	<3	<3.0	210	210	5	<5	<50	<50	7.6
MAY 10...	<5	<3	<3.0	210	210	<5	<5	<50	<50	6.0
JUN 26...	7	<3	<3.0	220	--	<5	<5	<50	<50	9.0
AUG 17...	<5	<3	<3.0	130	130	<5	<5	<100	--	7.5
SEP 27...	<5	<3	<3.0	170	170	<5	<5	<50	<50	9.0

ILLINOIS RIVER BASIN

05587000 MACOUPIN CREEK NEAR KANE, IL

LOCATION.--Lat 39°14'03", long 90°23'40", in SE1/4SE1/4 sec.11, T.9 N., R.12 W., Greene County, Hydrologic Unit 07130012, on left bank at downstream side of bridge on State Highway 267, 1.4 mi downstream from Link Branch, 3.5 mi northwest of Kane, and at mile 16.1.

DRAINAGE AREA.--868 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to November 1933, May to August 1940, October 1940 to current year.

REVISED RECORDS.--WSP 1175: 1924. WSP 1308: 1922(M), 1928(M), 1931(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 426.77 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1928, at site 2.0 mi upstream at various datums. May 17, 1940, to May 17, 1943, water-stage recorder, and May 18, 1943, to July 19, 1970, nonrecording gage at site 800 ft downstream at present datum. July 20 to Sept. 18, 1970, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--61 years (water years 1922-33, 1941-89), 533 ft^3/s, 8.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft^3/s, May 18, 1943, gage height, 28.5 ft; no flow Oct. 19-27, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 4	1730	*4,910	*17.91	No other peak greater than base discharge.			

Minimum discharge, 1.1 ft^3/s, Oct. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	2.1	41	119	50	70	238	296	389	42	118	48
2	10	2.2	31	76	42	61	422	169	271	29	58	69
3	3.9	2.1	24	55	41	56	3260	127	228	23	35	65
4	3.0	3.3	21	55	95	68	4670	110	192	22	25	37
5	3.1	3.6	18	214	114	84	3970	109	179	19	20	33
6	3.1	3.5	16	819	114	86	1630	104	151	16	17	25
7	3.1	3.5	14	690	74	56	708	92	129	15	15	20
8	2.9	2.8	12	422	40	76	553	85	112	14	14	81
9	2.7	4.1	e11	276	e35	76	447	84	97	14	13	2310
10	2.7	30	e10	142	e30	98	359	81	85	13	12	1890
11	2.7	21	e9.0	117	e28	392	302	74	75	12	11	700
12	2.7	80	e8.5	96	e26	1230	267	68	72	12	11	184
13	2.5	101	e8.0	78	e25	1050	238	64	68	11	11	104
14	2.3	35	e9.0	58	e40	756	218	61	63	11	10	79
15	2.3	19	e11	46	62	532	213	57	57	10	11	86
16	2.4	293	e13	41	89	331	206	53	54	11	11	79
17	6.1	374	e10	36	101	243	193	49	51	10	11	77
18	7.8	300	e9.0	32	94	197	176	47	48	10	10	85
19	3.3	137	e8.0	29	75	165	164	51	143	11	9.8	62
20	1.8	528	e7.0	25	94	774	155	49	91	11	10	43
21	1.7	749	e8.0	23	208	2670	148	52	50	12	14	31
22	2.2	398	288	18	270	1390	141	81	41	14	13	24
23	6.3	213	423	16	233	556	134	116	35	12	11	19
24	5.5	88	384	16	298	376	128	88	31	14	125	16
25	4.0	45	235	17	160	302	123	800	29	13	64	14
26	3.2	124	164	39	113	251	116	3130	26	12	38	11
27	3.1	128	178	54	90	222	117	2120	140	14	19	10
28	3.0	123	321	78	78	205	126	830	117	12	54	9.8
29	2.5	82	228	69	---	201	353	1390	58	12	79	9.8
30	2.3	51	201	61	---	190	445	2370	77	116	52	8.7
31	2.3	---	179	57	---	203	---	879	---	155	50	---
TOTAL	133.5	3947.2	2899.5	3874	2719	12967	20220	13686	3159	702	951.8	6230.3
MEAN	4.31	132	93.5	125	97.1	418	674	441	105	22.6	30.7	208
MAX	29	749	423	819	298	2670	4670	3130	389	155	125	2310
MIN	1.7	2.1	7.0	16	25	56	116	47	26	10	9.8	8.7
CFSM	.00	.15	.11	.14	.11	.48	.78	.51	.12	.03	.04	.24
IN.	.01	.17	.12	.17	.12	.56	.87	.59	.14	.03	.04	.27

CAL YR 1988 TOTAL 113054.4 MEAN 309 MAX 6480 MIN 1.1 CFSM .36 IN. 4.85
WTR YR 1989 TOTAL 71489.3 MEAN 196 MAX 4670 MIN 1.7 CFSM .23 IN. 3.06

e Estimated

05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT 31...	1030	17002	17002	2.3	577	7.30	6.5	24	12.9	9	K40
DEC 08...	1100	17002	17002	12	478	7.10	3.5	6.6	10.6	9	230
JAN 23...	1115	17002	17002	16	638	7.50	2.5	5.2	13.2	10	K20
FEB 28...	1100	17002	17002	73	650	7.80	1.5	5.2	13.9	19	K25
MAR 21...	1500	81700	80020	2660	299	7.50	5.0	--	10.3	--	--
30...	1045	17002	17002	188	692	7.80	13.0	8.6	9.2	18	K100
MAY 10...	1230	17002	17002	83	659	7.80	15.5	11	10.1	13	K320
23...	1045	81700	80020	123	537	7.40	18.5	--	7.4	--	--
31...	1200	17002	17002	756	349	7.30	21.5	180	7.8	47	3000
JUN 26...	1115	17002	17002	26	524	8.20	28.5	13	12.2	28	<50
AUG 17...	1100	17002	17002	12	562	7.70	23.0	9.8	8.5	10	K140
SEP 27...	1130	17002	17002	10	456	7.80	16.5	7.2	12.0	20	K220

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT 31...	270	41	67	67	27	26	21	22	2.4	2.4	234
DEC 08...	220	40	54	54	20	20	15	15	4.4	4.2	178
JAN 23...	270	78	66	66	26	26	23	23	3.9	4.0	194
FEB 28...	300	120	71	71	29	29	26	26	4.4	4.3	177
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
30...	320	120	75	76	31	31	22	22	4.3	3.9	201
MAY 10...	320	100	75	75	31	31	20	20	3.9	3.6	214
23...	--	--	--	--	--	--	--	--	--	--	--
31...	140	75	43	38	13	11	9.6	9.3	5.5	4.2	66
JUN 26...	260	55	63	63	24	24	15	15	5.1	5.1	202
AUG 17...	270	46	68	68	24	24	17	17	5.0	4.5	223
SEP 27...	210	33	54	54	19	19	14	14	5.0	5.2	181

ILLINOIS RIVER BASIN

05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN-IONIZED (MG/L AS N) (00619)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT 31...	58	4	1	<0.100	--	<0.100	<0.001	0.080	0.030	90	<50
DEC 08...	56	18	3	1.10	--	0.400	<0.001	0.220	0.060	980	<50
JAN 23...	110	8	2	2.20	--	0.260	<0.001	0.190	0.060	250	<50
FEB 28...	110	19	4	2.40	--	0.250	0.002	0.240	0.140	480	60
MAR 21...	--	--	--	--	2.40	--	--	--	--	--	--
30...	130	66	6	2.50	--	<0.100	<0.002	0.200	0.110	1100	120
MAY 10...	96	40	5	2.10	--	<0.100	<0.002	0.140	0.070	930	<50
23...	--	--	--	--	2.50	--	--	--	--	--	--
31...	40	406	40	3.20	--	0.230	0.002	0.526	0.160	10000	120
JUN 26...	55	35	11	<0.100	--	<0.100	<0.011	0.140	0.040	560	170
AUG 17...	59	34	7	<0.100	--	<0.100	<0.003	0.130	0.030	550	<50
SEP 27...	51	11	3	<0.100	--	<0.100	<0.002	0.160	0.060	460	50

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT 31...	90	84	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
DEC 08...	90	76	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
JAN 23...	80	76	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
FEB 28...	70	62	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
30...	100	96	<0.5	<0.5	<50	<50	<3	<3	7	7	<5
MAY 10...	100	96	<0.5	<0.5	<50	<50	--	--	6	6	<5
23...	--	--	--	--	--	--	--	--	--	--	--
31...	200	78	<0.5	<0.5	<50	<50	<3	<3	<5	<5	5
JUN 26...	100	100	<0.5	<0.5	<50	<50	<3	<3	5	<5	<5
AUG 17...	100	110	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5
SEP 27...	100	98	<0.5	<0.5	<50	<50	<3	<3	<5	<5	<5

05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
OCT										
31...	<5	<5	<5	850	70	<5	<5	1500	1400	<0.05
DEC										
08...	<5	<5	<5	1800	<50	8	<5	2000	2000	<0.05
JAN										
23...	<5	<5	<5	850	<50	<5	<5	810	800	<0.05
FEB										
28...	<5	<5	<5	800	<50	<5	<5	260	230	<0.05
MAR										
21...	--	--	--	--	--	--	--	--	--	--
30...	<5	<5	<5	1900	78	<5	<5	200	100	<0.05
MAY										
10...	<5	<5	<5	1200	<50	<5	<5	350	290	<0.05
23...	--	--	--	--	--	--	--	--	--	--
31...	<5	13	<5	12000	<50	13	<5	540	5	<0.05
JUN										
26...	<5	<5	<5	770	<50	<5	<5	700	480	<0.05
AUG										
17...	<5	<5	<5	1300	<50	<5	<5	2000	1700	<0.05
SEP										
27...	<5	<5	<5	960	<50	<5	<5	880	780	<0.05

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, TOTAL (UG/L AS V) (01087)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
31...	<5	<5	<3	<3.0	160	160	18	12	<50	<50
DEC										
08...	6	6	<3	<3.0	130	120	<5	<5	<50	<50
JAN										
23...	6	<5	<3	<3.0	160	--	<5	<5	<50	<50
FEB										
28...	8	<5	<3	<3.0	170	170	<5	<5	<50	<50
MAR										
21...	--	--	--	--	--	--	--	--	--	--
30...	7	7	<3	<3.0	210	210	<5	<5	<50	<50
MAY										
10...	6	<5	<3	<3.0	200	200	<5	<5	<50	<50
23...	--	--	--	--	--	--	--	--	--	--
31...	12	<5	<3	<3.0	130	110	23	<5	<100	<100
JUN										
26...	11	7	<3	<3.0	160	160	<5	<5	<50	<50
AUG										
17...	<5	<5	<3	<3.0	180	180	<5	<5	<100	<100
SEP										
27...	<5	9	<3	<3.0	140	140	<5	<5	<50	<50

05587060 ILLINOIS RIVER AT HARDIN, IL

LOCATION.--Lat 39°07'37", long 90°36'55", in NW1/4NW1/4 sec.26, T.10 S., R.2 W., Calhoun County, Hydrologic Unit 07130011, on right bank at downstream side of bridge on State Highways 16 and 100 in Hardin, 1.6 mi downstream from Macoupin Creek and at mile 21.5.

DRAINAGE AREA.--28,690 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1986 to September 1987 (gage heights only). Gage-height record for February 1932 to Sept. 30, 1986, available in files of U.S. Army Corps of Engineers. Partial records from 1878 through 1880 available in files of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 34.42 ft, Oct. 9, 1986; minimum, 18.21 ft, Jan. 25, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height, 38.2 ft Apr. 29, 1973; minimum observed, 7.33 ft, Oct. 7, 1879, from records of U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 21.20 ft, Sept. 18; minimum 18.71 ft, Aug. 23.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
OBSERVATION AT 08:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.17	19.13	19.48	19.34	19.48	19.26	18.99	19.85	19.93	19.29	19.22	19.29
2	19.00	18.95	19.54	19.46	19.38	19.12	19.15	19.71	20.09	19.43	19.23	19.29
3	18.95	19.14	19.47	19.41	19.37	19.10	19.48	19.68	20.48	19.34	19.44	19.77
4	19.00	19.09	19.34	19.34	19.20	19.29	19.70	19.90	20.66	19.34	19.27	19.97
5	19.09	18.96	19.34	19.54	19.18	19.13	19.94	19.76	20.62	19.50	19.37	20.29
6	19.19	19.00	19.30	19.59	18.88	19.10	19.53	19.56	20.58	19.34	19.50	20.14
7	18.98	19.06	19.29	19.49	19.21	19.23	19.60	19.55	20.44	19.31	19.48	20.05
8	18.82	19.15	19.09	19.46	19.37	19.45	19.84	19.69	20.45	19.17	19.26	20.12
9	18.99	19.22	19.24	19.45	19.22	19.39	20.42	19.65	20.46	19.27	19.45	21.02
10	18.88	19.23	19.15	19.32	19.22	19.39	20.61	19.55	20.37	19.28	19.30	20.80
11	18.82	19.13	19.16	19.35	19.19	19.47	20.61	19.64	20.54	19.25	19.46	20.81
12	18.90	19.48	19.18	19.46	19.30	19.65	20.43	19.51	20.63	19.29	19.25	20.87
13	19.12	19.40	19.12	19.59	19.42	19.88	20.27	19.50	20.22	19.23	19.16	20.75
14	19.10	19.46	19.38	19.61	19.24	19.78	19.82	19.44	20.29	19.17	19.31	20.83
15	18.91	19.45	18.89	19.68	19.13	19.91	19.83	19.47	20.07	19.31	19.33	20.89
16	19.15	19.56	18.72	19.64	19.20	19.81	19.77	19.37	20.11	19.10	19.32	21.01
17	19.01	19.44	18.74	19.60	19.18	20.06	19.85	19.42	20.03	19.15	19.26	21.13
18	18.76	19.62	19.22	19.57	19.06	19.87	19.68	19.39	19.85	19.10	19.33	21.20
19	19.16	19.64	19.45	19.39	19.14	19.68	19.62	19.61	19.24	19.14	19.37	21.18
20	19.18	19.51	19.38	19.12	19.12	20.04	19.84	19.39	19.62	19.21	19.35	21.09
21	19.29	19.73	19.40	19.10	19.07	20.13	19.73	19.41	19.48	19.40	19.16	21.06
22	18.94	19.79	19.28	19.22	19.04	19.92	19.96	19.45	19.66	19.56	19.22	21.04
23	19.44	19.78	19.54	19.22	19.01	19.86	19.91	19.51	19.66	19.55	18.71	20.90
24	18.86	19.71	19.26	19.19	19.16	19.95	19.91	19.67	19.49	19.64	18.84	20.95
25	19.26	19.74	19.04	19.19	19.39	19.68	19.77	19.73	19.38	19.54	19.21	20.89
26	19.02	19.70	19.28	19.21	19.09	19.67	19.73	20.23	19.45	19.70	19.27	20.73
27	19.02	19.51	19.37	19.22	19.12	19.61	19.71	19.98	19.50	19.54	19.26	20.59
28	19.17	19.31	19.34	19.36	19.27	19.78	19.78	19.89	19.42	19.42	19.19	20.46
29	18.98	19.48	19.45	19.29	---	19.65	19.92	20.16	19.23	19.38	19.36	20.28
30	19.09	19.27	19.59	19.22	---	19.49	19.74	20.31	19.36	19.57	19.18	19.99
31	19.12	---	19.27	19.38	---	19.12	---	20.11	---	19.27	19.21	---
MEAN	19.04	19.39	19.27	19.39	19.20	19.60	19.84	19.68	19.98	19.35	19.27	20.58
MAX	19.44	19.79	19.59	19.68	19.48	20.13	20.61	20.31	20.66	19.70	19.50	21.20
MIN	18.76	18.95	18.72	19.10	18.88	19.10	18.99	19.37	19.23	19.10	18.71	19.29

05587060 ILLINOIS RIVER AT HARDIN, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 01.

REMARKS.--Water-discharge records from Illinois River at Meredosia (station 05585500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
NOV											
01...	1030	17002	17002	6290	702	7.10	10.0	12	11.7	21	K10
DEC											
12...	1000	17002	17002	9810	745	7.20	2.0	35	12.9	17	<10
JAN											
24...	1015	17002	17002	6940	859	7.60	2.5	23	14.9	16	K10
MAR											
01...	1000	17002	17002	8470	921	7.80	1.5	7.7	14.7	17	K2
APR											
03...	1000	17002	17002	14200	761	8.00	11.5	83	8.6	36	K7100
MAY											
11...	1000	17002	17002	9870	793	7.90	15.5	23	9.3	21	<100
JUN											
27...	1000	17002	17002	10100	739	8.10	29.0	7.2	7.3	25	K40
AUG											
17...	1000	17002	17002	8030	717	7.70	26.0	13	5.0	17	<50
SEP											
26...	1130	17002	17002	28600	630	--	17.0	5.9	--	23	K100

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
NOV											
01...	240	240	58	57	24	24	56	55	4.5	4.4	10
DEC											
12...	310	310	79	77	30	29	38	38	4.3	4.0	62
JAN											
24...	300	300	73	72	29	28	58	57	3.6	3.3	47
MAR											
01...	360	360	86	87	33	34	61	62	4.6	4.5	47
APR											
03...	290	290	75	70	31	28	49	48	4.8	3.6	340
MAY											
11...	330	330	78	77	33	33	42	42	4.1	3.9	70
JUN											
27...	310	310	77	75	30	30	37	36	5.0	4.4	50
AUG											
17...	260	260	61	61	26	25	53	53	6.3	6.1	132
SEP											
26...	300	300	72	71	29	29	24	24	4.2	3.5	192

05587060 ILLINOIS RIVER AT HARDIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UNIONIZED (MG/L AS N) (00619)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)
NOV 01...	3	2.30	<0.100	<0.001	0.256	0.150	450	<50	40	38
DEC 12...	7	4.40	0.340	<0.001	0.240	0.180	1300	<50	60	45
JAN 24...	5	6.50	0.340	0.001	0.270	0.160	940	70	50	43
MAR 01...	8	5.60	0.850	0.005	0.330	0.220	730	50	50	47
APR 03...	40	4.50	0.490	0.011	0.530	0.200	6400	150	100	63
MAY 11...	11	5.60	<0.100	<0.002	0.260	0.150	1600	150	70	58
JUN 27...	9	4.00	0.130	0.012	0.246	0.060	1300	230	70	59
AUG 17...	18	2.10	0.130	0.004	0.290	0.210	910	<50	60	50
SEP 26...	17	4.40	0.050	--	0.280	0.140	2500	120	80	61

DATE	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)
NOV 01...	<0.5	<0.5	170	160	<3	<3	<5	<5	<5	<5
DEC 12...	<0.5	<0.5	120	120	<3	<3	<5	<5	<5	<5
JAN 24...	<0.5	<0.5	110	110	<3	<3	<5	<5	<5	<5
MAR 01...	<0.5	<0.5	150	--	<3	<3	<5	<5	<5	<5
APR 03...	<0.5	<0.5	100	100	<3	<3	10	<5	<5	<5
MAY 11...	<0.5	<0.5	120	120	<3	<3	10	<5	<5	<5
JUN 27...	<0.5	<0.5	150	130	<3	<3	6	5	<5	<5
AUG 17...	<0.5	<0.5	140	140	<3	<3	<5	<5	<5	<5
SEP 26...	<0.5	<0.5	110	110	<3	<3	<5	<5	<5	<5

05587060 ILLINOIS RIVER AT HARDIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
NOV										
01...	<5	<5	730	<50	<5	<5	71	<5	0.06	<5
DEC										
12...	<5	<5	2000	<50	9	<5	87	5	<0.05	5
JAN										
24...	<5	<5	1500	<50	<5	<5	57	7	<0.05	7
MAR										
01...	<5	<5	1200	<50	<5	<5	71	28	<0.05	12
APR										
03...	10	<5	8300	<50	9	<5	400	81	<0.05	9
MAY										
11...	<5	<5	2200	<50	<5	<5	160	6	<0.05	<5
JUN										
27...	<5	<5	1600	<50	<5	<5	100	<5	<0.05	9
AUG										
17...	<5	<5	1400	<50	<5	<5	110	26	<0.05	9
SEP										
26...	6	<5	3000	<50	<5	<5	120	<5	<0.05	<5

DATE	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, TOTAL (UG/L AS V) (01087)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV										
01...	<5	<3	<3.0	250	250	10	12	<50	--	7.2
DEC										
12...	<5	<3	<3.0	280	280	<5	<5	<50	<50	8.3
JAN										
24...	7	<3	<3.0	240	240	<5	<5	<50	<50	5.7
MAR										
01...	9	<3	<3.0	310	310	<5	<5	<50	<50	8.9
APR										
03...	<5	<3	<3.0	260	240	12	<5	<50	<50	12
MAY										
11...	<5	<3	<3.0	230	230	6	<5	<50	<50	6.3
JUN										
27...	5	<3	<3.0	210	210	<5	<5	<50	<50	10
AUG										
17...	<5	<3	<3.0	260	260	<5	<5	<100	<100	8.0
SEP										
26...	<5	<3	<3.0	240	240	5	<5	<50	<50	8.0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites are given in a separate table.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. Datum of gage is in feet above National Geodetic Vertical Datum of 1929.

Annual maximum discharge at crest-stage partial-record stations during water year 1989

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		ILLINOIS RIVER BASIN					
05549000	Boone Creek near McHenry, Ill.	Lat 42°19'15", long 88°18'45", in NW1/4SW1/4 sec.4, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Bull Valley Road, 2.5 mi southwest of McHenry, and at mile 4.8. Datum of gage is 769.56 ft.	15.5	1949-82ǂ, 1983-89	--	<2.92	<95
05554000	North Fork Vermilion River near Charlotte, Ill.	Lat 40°50'08", long 88°17'58", in SE1/4SE1/4 sec.4, T.27 N., R.8 E., Livingston County, Hydrologic Unit 07130002, at Foreman highway bridge, 1.2 mi northwest of Charlotte, 5.5 mi north of Chatsworth. Datum of gage is 638.00 ft.	186	1943-62ǂ, 1963-89	--	<9.18	<1,860
05557000	West Bureau Creek at Wyanet. Ill.	Lat 41°21'54", long 89°34'08", in NE corner of sec.21, T.16 N., R.8 E., Bureau County, Hydrologic Unit 07130001, on left bank at upstream side of bridge on U.S. Highways 6 and 34, 0.5 mi east of Wyanet. Datum of gage is 573.14 ft.	86.7	1937-66ǂ, 1967-89	09-06-89	5.03	769
05557500	East Bureau Creek near Bureau, Ill.	Lat 41°20'06", long 89°22'53", in NW1/4NE1/4 sec.31, T.16 N., R.10 E., Bureau County, Hydrologic Unit 07130001, on left bank at downstream side of bridge, 0.5 mi downstream from Brush Creek, 2.5 mi upstream from mouth, and 3.5 mi north of Bureau. Datum of gage is 484.45 ft.	99.0	1937-66ǂ, 1967-89	09-06-89	12.65	3,180
05563000	Kickapoo Creek near Kickapoo, Ill.	Lat 40°48'00", long 89°48'00", in SW1/4SE1/4 sec.34, T.10 N., R.6 E., Peoria County, Hydrologic Unit 07130003, at bridge on U.S. Highway 150, 0.8 mi upstream from mouth of the West Fork of Kickapoo Creek and 2.5 mi northwest of Kickapoo. Datum of gage is 514.85 ft.	119	1945-62ǂ, 1963-89	--	<9.94	<2,440

ǂ Operated as a continuous-record gaging station.
< Less than.

Annual maximum discharge at crest-stage partial-record stations during water year 1989--Continued

						Annual maximum	
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		ILLINOIS RIVER BASIN--Continued					
05563500	Kickapoo Creek at Peoria, Ill.	Lat 40°40'52", long 89°39'19", in NE1/4NW1/4 sec.13, T.8 N., R.7 E., Peoria County, Hydrologic Unit 07130003, on left bank at upstream side of pier of bridge on State Highway 116, 0.5 mi west of Peoria, 1.5 mi downstream from Dry Run, and 4.0 mi upstream from mouth. Datum of gage is 448.37 ft.	297	1943-71†, 1972-89	--	<11.71	<4,000
05567000	Panther Creek near El Paso, Ill.	Lat 40°46'05", long 89°04'30", in SE1/4NW1/4 sec.26, T.27 N., R.1 E., Woodford County, Hydrologic Unit 07130004, at bridge on county road just downstream from East Branch Panther Creek and 3.8 mi northwest of El Paso. Datum of gage is 658.86 ft.	93.9	1950-60†, 1961-89	--	<5.34	<354
05575500	South Fork Sangamon River at Kincaid, Ill.	Lat 39°34'44", long 89°23'31", in SW1/4NE1/4 sec.14, T.13 N., R.3 W., Christian County, Hydrologic Unit 07130007, at bridge on State Highway 104, 1.0 mi southeast of Kincaid. Datum of gage is 538.65 ft.	562	1917-27†, 1929-30†, 1933†, 1945-61†, 1962-89	06-02-89	15.81	1,870
05580500	Kickapoo Creek near Lincoln, Ill.	Lat 40°11'30", long 89°21'40", in NE1/4NW1/4 sec.18, T.20 N., R.2 W., Logan County, Hydrologic Unit 07130009, on left bank at downstream side of highway bridge, 1,000 ft upstream from abandoned railroad bridge, 3.0 mi north of Lincoln, and 7.5 mi upstream from mouth. Datum of gage is 557.08 ft.	306	1945-71†, 1972-89	--	<9.38	<1,540
05581500	Sugar Creek near Hartsburg, Ill.	Lat 40°13'20", long 89°24'12", in SE1/4SW1/4 sec.35, T.21 N., R.3 W., Logan County, Hydrologic Unit 07130009, on right bank at downstream side of bridge on county road, 0.4 mi upstream from State Highway 121, 2.6 mi southwest of Hartsburg, 4.1 mi northwest of Lincoln, and 6.6 mi downstream from West Fork. Datum of gage is 548.70 ft.	333	1945-71†, 1972-89	05-26-89	5.72	1,730
05584400	Drowning Fork at Bushnell, Ill.	Lat 40°33'45", long 90°31'23", in NE1/4SE1/4 sec.29, T.7 N., R.1 W., McDonough County, Hydrologic Unit 07130010, on right bank at downstream side of bridge 200 ft upstream from Burlington Northern RR. bridge, 1 mi northwest of Bushnell and at mile 5.5. Datum of gage is 615.02 ft.	26.3	1961-82†, 1983-89	--	<5.76	<65

† Operated as a continuous-record gaging station.
< Less than.
a Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1989--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		ILLINOIS RIVER BASIN--Continued					
05586000	North Fork Mauvaise Terre Creek near Jacksonville, Ill.	Lat 39°45'38", long 90°08'07", in SE1/4NW1/4 sec.8, T.15 N., R.9 W., Morgan County, Hydrologic Unit 07130011, on left bank at downstream side of county road bridge, 2.5 mi north of Arnold, 4.5 mi upstream from mouth, 6.0 mi east of Jacksonville, and at mile 6.2. Datum of gage is 579.27 ft.	29.1	1950-75‡, 1976-89	--	<7.51	<227
05586500	Hurricane Creek near Roodhouse, Ill.	Lat 39°29'20", long 90°25'00", in NE1/4 sec.15, T.12 N., R.12 W., Greene County, Hydrologic Unit 07130011, on left bank 150 ft downstream from bridge on State Highway 106, 2.0 mi west of Roodhouse, and at mile 12.5. Datum of gage is 597.16 ft.	2.30	1951-75‡, 1976-89	--	<5.86	<70

‡ Operated as a continuous-record gaging station.
< Less than.

Miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1989

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		ILLINOIS RIVER BASIN				
05525075	Iroquois River above Watseka, Ill.	Lat 40°47'34", long 87°42'21", in SE1/4NW1/4 sec.27, T.27 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on County Road 2230 E bridge, 1.0 mi northwest of Watseka and at mile 39.8.	--	--	09-02-89 09-03-89	3,140 3,350
05525100	Iroquois River at Watseka, Ill.	Lat 40°47'36", long 87°44'41", in SW1/4NW1/4 sec.29, T.27 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on State Highway 1 bridge, 1 mi north of intersection with U.S. Highway 24 at Watseka and at mile 34.5.	738	1956	09-02-89 09-03-89	3,290 3,580
05525510	Sugar Creek at Woodland, Ill.	Lat 40°42'51", long 87°44'05", in NW1/4NE1/4 sec.29, T.26 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on county bridge at Woodland and at mile 11.8.	--	--	09-02-89 09-03-89	936 438
05525520	Sugar Creek at Watseka, Ill.	Lat 40°45'30", long 87°44'25", in NE1/4NW1/4 sec.8, T.26 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on Second Street bridge 0.5 mile south of Watseka and at mile 4.0.	560	1967-70	09-02-89 09-03-89	1,210 715
05555000	Vermilion River at Streator, Ill.	Lat 41°05'35", long 88°50'05", in SE1/4 sec.2, T.30 N., R.3 E., Livingston County, Hydrologic Unit 07130002, on Bridge Street bridge, 0.1 mi south of State Highway 18, at Streator.	1,084	1914-30†, 1960-62, 1965, 1968, 1970, 1972-74, 1976-78, 1980-81, 1984-85	05-15-89	159
05560500	Farm Creek at Farmdale, Ill.	Lat 40°40'00", long 89°30'15", in NE1/4SE1/4 sec.36, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank 200 ft downstream from bridge, 0.2 mi east of Farmdale, 0.2 mi upstream from Norfolk & Western Railway bridge, 0.3 mi downstream from Toledo, Peoria & Western RR. bridge, and at mile 5.7.	27.4	1948-85†, 1986-88	03-27-89 05-12-89 06-28-89 08-08-89	2.63 3.83 1.58 .12
05561500	Fondulac Creek near East Peoria, Ill.	Lat 40°40'38", long 89°31'52", on line between SW1/4 and SE1/4 sec.26, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank at upstream side of bridge on State Highway 8, 0.2 mi upstream from Norfolk & Western Railway bridge, 3 mi northeast of East Peoria, and at mile 0.4.	5.54	1948-85†, 1986-88	03-27-89 05-12-89 06-25-89 08-08-89	0 .09 0 0
05578000	Sangamon River at Petersburg, Ill.	Lat 40°00'37", long 89°50'42", in SW1/4NW1/4 sec.13, T.18 N., R.7 W., Menard County, Hydrologic Unit 07130008, on State Highway 123 bridge, 0.2 mi east of Petersburg, and at mile 45.9.	3,063	1947-51†, 1958-66, 1968-70, 1972-74, 1976-88	04-11-89	4,300

† Operated as a continuous-record gaging station.

MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

The water-quality data collected at these partial-record stations were collected as part of a 2-week ecosystem survey. The survey was conducted as part of the National Water-Quality Assessment (NAWQA) pilot project in the upper Illinois River basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC-ITY, MEAN (F/S) (00055)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
ILLINOIS RIVER BASIN												
05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL												
JUL												
28...	1015	81700	80020	14	60.0	1.50	54	1820	8.08	26.5	--	--
28...	1034	81700	81700	1	60.0	--	--	1880	7.60	--	24.0	6.3
28...	1035	81700	81700	1	60.0	--	--	1880	7.70	--	24.0	6.3
28...	1036	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.3
28...	1037	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.3
28...	1038	81700	81700	1	60.0	--	--	1890	7.80	--	24.0	6.3
28...	1039	81700	81700	1	60.0	--	--	1890	7.80	--	24.0	6.2
28...	1040	81700	81700	1	60.0	--	--	1890	7.80	--	24.0	6.1
28...	1041	81700	81700	1	60.0	--	--	1890	7.80	--	24.0	6.1
28...	1042	81700	81700	1	60.0	--	--	1890	7.80	--	24.0	6.1
28...	1043	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.1
28...	1044	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.1
28...	1045	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.1
28...	1046	81700	81700	1	60.0	--	--	1880	7.80	--	24.0	6.1
28...	1047	81700	81700	1	60.0	--	--	1680	7.80	--	24.0	6.1
05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL												
AUG												
02...	1030	81700	81700	1	116	--	--	1140	7.90	--	24.5	7.2
02...	1031	81700	81700	1	116	--	--	1140	7.90	--	24.0	7.0
02...	1032	81700	81700	1	116	--	--	1140	7.90	--	24.0	7.1
02...	1033	81700	81700	1	116	--	--	1140	7.90	--	24.0	7.0
02...	1034	81700	81700	1	116	--	--	1140	7.90	--	24.0	7.0
02...	1035	81700	81700	1	116	--	--	1140	7.90	--	23.5	7.0
02...	1036	81700	81700	1	116	--	--	1130	7.90	--	23.5	7.0
02...	1037	81700	81700	1	116	--	--	1120	7.90	--	23.5	6.9
02...	1038	81700	81700	1	116	--	--	1110	7.90	--	23.5	6.7
02...	1039	81700	81700	1	116	--	--	1100	7.90	--	23.5	6.6
02...	1040	81700	81700	1	116	--	--	1100	7.90	--	23.5	6.6
05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI												
JUL												
27...	1400	81700	80020	8	34.0	E0.75	--	866	8.43	30.5	--	--
27...	1401	81700	81700	1	34.0	--	--	792	8.20	--	31.5	10.9
27...	1402	81700	81700	1	34.0	--	--	792	8.20	--	31.5	11.2
27...	1403	81700	81700	1	34.0	--	--	792	8.30	--	31.5	11.2
27...	1404	81700	81700	1	34.0	--	--	793	8.30	--	31.5	11.2
27...	1405	81700	81700	1	34.0	--	--	794	8.20	--	31.0	11.2
27...	1406	81700	81700	1	34.0	--	--	793	8.30	--	31.5	11.3
27...	1407	81700	81700	1	34.0	--	--	794	8.30	--	31.0	11.3
27...	1408	81700	81700	1	34.0	--	--	793	8.20	--	31.5	11.1

MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JUL												
28...	440	440	4.0	100	45	210	9.4	0	287	240	235	180
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--

05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
AUG												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--

05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JUL												
27...	--	--	0	--	--	--	--	0	355	290	291	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	-	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
JUL											
28...	330	0.50	11	1090	932	0.140	9.40	0.290	0.270	0.63	1.3
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
AUG											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--

05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
JUL											
27...	--	--	--	--	--	0.100	3.80	--	0.060	0.44	1.2
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
ILLINOIS RIVER BASIN											
05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued											
JUL											
28...	0.90	1.50	1.20	1.00	1600	<10	100	47	10	<0.5	320
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
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05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued											
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05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued											
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27...	0.50	0.150	0.040	0.040	--	--	--	--	--	--	--
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued

DATE	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
JUL											
28...	310	5	2	4	<5	<3	20	<10	2900	13	3
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05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued

DATE	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
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05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued

DATE	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
ILLINOIS RIVER BASIN											
05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued											
JUL											
28...	<10	70	22	<0.10	<0.1	10	8	<10	<1	2.0	570
28...	--	--	--	--	--	--	--	--	--	--	--
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05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued											
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05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued											
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05540258 - EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL--Continued

DATE	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL											
28...	<6	40	17	9.1	5.0	1.9	<0.01	<0.010	85	12	100
28...	--	--	--	--	--	--	--	--	--	--	--
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05540490 - DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL--Continued

DATE	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
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05544908 - HONEY CREEK AT SCHOOL BELL ROAD NEAR EAST TROY, WI--Continued

DATE	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL											
27...	--	--	--	--	--	--	--	--	45	0.0	86
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	STREAM WIDTH (FT) (00004)	STREAM VELOC- ITY, MEAN (F/S) (00055)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
ILLINOIS RIVER BASIN												
05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI												
JUL												
27...	1115	81700	80020	9	20.0	1.50	--	767	8.21	30.5	--	--
27...	1138	81700	81700	1	20.0	--	--	779	7.80	--	27.5	7.9
27...	1139	81700	81700	1	20.0	--	--	779	7.80	--	27.5	7.9
27...	1140	81700	81700	1	20.0	--	--	779	7.90	--	27.5	8.1
27...	1141	81700	81700	1	20.0	--	--	780	7.90	--	27.5	8.2
27...	1142	81700	81700	1	20.0	--	--	780	7.90	--	27.5	8.3
27...	1143	81700	81700	1	20.0	--	--	780	7.90	--	27.5	8.4
27...	1144	81700	81700	1	20.0	--	--	781	7.90	--	27.0	8.5
27...	1145	81700	81700	1	20.0	--	--	781	7.90	--	27.0	8.4
27...	1146	81700	81700	1	20.0	--	--	780	7.90	--	27.0	7.9
05552200 - INDIAN CREEK NEAR HARDING, IL												
JUL												
24...	1326	81700	80020	9	25.0	--	--	523	8.39	34.0	--	--
24...	1327	81700	81700	1	25.0	--	--	531	8.00	--	27.5	11.1
24...	1328	81700	81700	1	25.0	--	--	532	8.00	--	27.5	10.8
24...	1329	81700	81700	1	25.0	--	--	533	8.00	--	27.0	10.7
24...	1330	81700	81700	1	25.0	--	--	534	8.00	--	27.0	10.7
24...	1331	81700	81700	1	25.0	--	--	534	8.10	--	27.0	10.6
24...	1332	81700	81700	1	25.0	--	--	533	8.00	--	27.0	10.5
24...	1333	81700	81700	1	25.0	--	--	534	8.00	--	27.0	10.5
24...	1334	81700	81700	1	25.0	--	--	534	8.00	--	27.0	10.5
24...	1335	81700	81700	1	25.0	--	--	533	8.00	--	27.0	10.5
24...	1336	81700	81700	1	25.0	--	--	533	8.00	--	27.0	10.6

MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
JUL												
27...	370	370	11	83	40	16	2.2	0	342	280	280	62
27...	--	--	--	--	--	--	--	--	--	--	--	--
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05552200 - INDIAN CREEK NEAR HARDING, IL--Continued

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	ACIDITY (MG/L AS H) (71825)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
JUL												
24...	260	260	0	54	30	9.5	3.0	0	249	200	204	42
24...	--	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
ILLINOIS RIVER BASIN											
05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued											
JUL											
27...	32	0.20	13	354	260	0.060	2.60	0.030	0.020	0.88	1.4
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
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27...	--	--	--	--	--	--	--	--	--	--	--
05552200 - INDIAN CREEK NEAR HARDING, IL--Continued											
JUL											
24...	19	0.20	4.4	288	164	0.010	0.430	0.030	0.020	0.48	0.60
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
JUL											
27...	0.90	0.150	0.030	0.020	190	<10	100	61	10	<0.5	50
27...	--	--	--	--	--	--	--	--	--	--	--
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27...	--	--	--	--	--	--	--	--	--	--	--

05552200 - INDIAN CREEK NEAR HARDING, IL--Continued

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
JUL											
24...	0.50	0.090	0.040	0.020	240	20	100	67	<10	<0.5	30
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

ILLINOIS RIVER BASIN

05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
JUL											
27...	40	<1	<1	5	<5	<3	<10	<10	530	17	1
27...	--	--	--	--	--	--	--	--	--	--	--
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05552200 - INDIAN CREEK NEAR HARDING, IL--Continued

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
JUL											
24...	50	<1	<1	3	<5	<3	<10	<10	430	8	1
24...	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
ILLINOIS RIVER BASIN											
05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued											
JUL											
27...	<10	100	29	<0.10	0.2	<10	11	<10	<1	<1.0	140
27...	--	--	--	--	--	--	--	--	--	--	--
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27...	--	--	--	--	--	--	--	--	--	--	--
05552200 - INDIAN CREEK NEAR HARDING, IL--Continued											
JUL											
24...	<10	80	14	0.10	<0.1	<10	3	<10	<1	<1.0	130
24...	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER QUALITY ANALYSES

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
ILLINOIS RIVER BASIN											
05544950 - HONEY CREEK AT HILL VALLEY ROAD NEAR EAST TROY, WI--Continued											
JUL											
27...	<6	110	49	12	6.9	2.8	<0.01	<0.010	29	0.0	96
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
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27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
05552200 - INDIAN CREEK NEAR HARDING, IL--Continued											
JUL											
24...	<6	110	12	--	4.5	0.5	<0.01	<0.010	21	0.0	95
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
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GROUND-WATER RECORDS

4J

BUREAU COUNTY

412220089280301. Local number, 16N9E-16.8e.

LOCATION.--Lat 41°22'20", long 89°28'03", Hydrologic Unit 07130001, 326 First Street, Princeton.
Owner: Helen Croisant.

AQUIFER.--Glacial Drift.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 32 in., depth 29 ft, cribbed with brick.

INSTRUMENTATION.--Observer reads steel float-tape on or about the 10th and 20th day of each month.

DATUM.--Land-surface datum is 698 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of platform, 0.05 ft below land-surface datum, since Nov. 2, 1982.

PERIOD OF RECORD.--November 1942 to current year.

REVISED RECORDS.--WDR IL-86-2: 1975, 1977, 1982, 1985.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.94 ft below land-surface datum, May 15, 1943; lowest, 26.64 ft below land-surface datum, Mar. 30, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	10.10	DEC 10	8.50	FEB 10	8.40	APR 10	7.34	JUN 10	8.20	AUG 10	10.75
20	10.02	20	8.65	20	8.20	20	7.65	20	8.18	20	10.95
NOV 10	9.30	JAN 10	8.10	MAR 10	7.50	MAY 10	7.18	JUL 10	9.75	SEP 10	5.50
20	6.20	20	8.25	20	7.10	20	7.65	20	10.00	20	6.60

DU PAGE COUNTY

414217087592801. Local number 37N11E-9.8c.

LOCATION.--Lat 41°42'17", long 87°59'28", Hydrologic Unit 07120004, at Argonne National Laboratory. Owner: Argonne National Laboratory.

AQUIFER.--Niagara Dolomite of Middle Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4.0 in, depth 140 ft, cased to 90.0 ft, open end.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land-surface datum is 733 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.31 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells. Water levels are presently below casing causing float to catch on objects. Casing diameter also affects recorder sensitivity.

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WDR IL-79-2: 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 88.97 ft below land-surface datum, May 27, 1951; lowest, 105.87 ft below land-surface datum, Sept. 23, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	104.82	104.59	105.20	104.91	105.24	105.13	---	105.11	105.36	105.74	105.65	105.77
10	104.67	105.12	105.11	105.21	105.20	105.17	105.14	105.22	105.46	105.64	105.78	105.74
15	104.72	105.08	105.22	105.14	105.41	105.20	104.97	105.18	105.35	105.66	105.76	105.75
20	104.86	105.24	105.09	105.32	105.14	105.04	105.10	105.29	105.42	105.63	105.66	105.75
25	104.76	105.07	105.17	105.14	105.03	---	105.02	105.20	105.44	105-71	105.70	105.75
EOM	104.93	105.09	105.04	105.02	105.14	---	105.19	105.34	105.53	105.82	105.73	105.69

WTR YR 1989 HIGH 104.53 OCT. 17 LOW 105.87 SEPT. 23

DU PAGE COUNTY

414236087583301. Local number, 37N11E-9.2f1.

LOCATION.--Lat 41°42'36", long 87°58'33", Hydrologic Unit 07120004, at Argonne National Laboratory. Owner: Argonne National Laboratory.

AQUIFER.--Niagara Dolomite of Middle Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in, depth 199 ft, cased to 86 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land-surface datum is 705 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells.

PERIOD OF RECORD.--November 1948 to current year.

REVISED RECORDS.--WDR IL-79-2: 1978(H).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 57.79 ft below land-surface datum, May 8, 1950; lowest, 97.55 ft below land-surface datum, Aug. 18, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	95.46	95.22	96.09	---	96.12	95.90	95.53	95.43	95.95	96.44	97.31	97.27
10	95.20	95.66	96.12	96.09	95.77	95.64	95.52	95.50	96.10	96.55	97.53	97.20
15	94.98	95.34	---	95.99	96.18	95.49	95.01	95.31	95.75	96.88	97.33	96.97
20	95.47	96.04	---	96.24	95.62	95.34	95.30	95.47	95.80	96.86	97.33	96.94
25	95.41	95.45	---	95.73	95.54	95.49	95.18	95.40	96.23	---	97.47	96.70
EOM	95.37	95.61	---	95.33	95.69	95,32	95.49	95.81	96.51	97.23	97.33	96.76

WTR YR 1989 HIGH 94.50 MAR. 14 LOW 97.55 AUG. 18

LAKE COUNTY

422803087475301. Local number, 46N12E-14.6g1.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit. Owner: U.S. Geological Survey.

AQUIFER.--Galena. Platteville, and Ancell Groups of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 940 ft, cased to 589 ft, unscreened.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top coupling on 1.25 in. plastic pipe, 2.73 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--November 1988 to September 1989. Miscellaneous water-level measurements from December 1981 to to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 231.23 ft below land-surface datum, Mar. 14, 1989; lowest, 234.50 ft below land-surface datum, Sept. 27, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	231.94	231.85	232.19	232.02	231.97	231.83	232.04	---	---	233.73
10	---	---	232.12	232.24	232.09	232.13	232.20	232.15	232.18	---	---	233.76
15	---	---	232.22	232.08	232.35	232.03	231.91	232.01	232.00	---	233.34	233.96
20	---	---	232.04	232.35	231.94	232.03	232.07	231.95	232.16	---	233.34	234.11
25	---	---	232.33	232.06	232.00	231.99	231.85	231.83	232.11	---	233.57	234.19
EOM	---	232.35	231.97	231.66	232.01	231.98	232.15	232.01	232.29	---	233.53	234.48

WTR YR 1989 HIGH 231.23 MAR. 14 LOW 234.50 SEPT. 27

LAKE COUNTY

422803087475302. Local number, 46N12E-14.6g2.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit. Owner: U.S. Geological Survey.

AQUIFER.--Lower Mount Simon Sandstone of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10 in. borehole, diameter 1.25 in., depth 2,264 ft, cased to 2,244 ft, 2 in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top coupling on 1.25 in. plastic pipe, 2.67 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--November 1988 to September 1989. Miscellaneous water-level measurements from December 1981 to to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 197.88 ft below land-surface datum, Dec. 14, 1988; lowest, 200.86 ft below land-surface datum, Sept. 27, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	198.49	198.53	199.00	199.04	199.17	199.16	199.46	199.73	199.68	200.30
10	---	---	198.75	198.99	198.95	199.14	199.28	199.48	199.62	199.57	199.99	200.26
15	---	---	198.85	198.81	199.38	199.04	199.12	199.34	199.47	199.78	199.95	200.40
20	---	---	198.68	199.09	198.91	199.20	199.17	199.30	199.65	199.59	199.95	200.50
25	---	---	198.96	198.85	198.99	199.16	199.06	199.23	199.62	199.90	200.22	200.52
EOM	---	198.96	198.64	198.44	199.04	199.18	199.50	199.44	199.77	199.87	200.14	200.60

WTR YR 1989 HIGH 197.88 DEC. 14 LOW 200.86 SEPT. 27

LAKE COUNTY

422803087475303. Local number, 46N12E-14.6g3.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit. Owner: U.S. Geological Survey.

AQUIFER.--Elmhurst Sandstone member of the Eau Claire Formation and the upper Mount Simon Sandstone of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10 in. borehole, diameter 1.25 in., depth 1,686 ft, cased to 1,666 ft, 2 in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top coupling on 1.25 in. plastic pipe, 2.67 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--November 1988 to September 1989. Miscellaneous water-level measurements from December 1981 to to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 228.27 ft below land-surface datum, Jan. 31, 1989; lowest, 232.22 ft below land-surface datum, Sept. 30, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	229.08	228.97	229.02	229.76	229.59	229.48	229.64	229.90	230.22	---
10	---	---	229.43	229.42	228.86	229.86	229.86	229.82	229.81	229.79	230.64	---
15	---	---	229.58	229.16	229.18	229.69	229.53	229.69	229.63	230.06	---	---
20	---	---	229.28	229.48	228.94	229.70	229.68	229.60	229.80	229.92	---	---
25	---	---	229.56	229.16	229.58	229.63	229.43	229.42	229.74	230.33	---	---
EOM	---	229.41	229.15	228.57	229.76	229.61	229.86	229.62	229.92	230.38	---	---

WTR YR 1989 HIGH 228.27 JAN. 31 LOW 232.22 SEPT. 30

LAKE COUNTY

422803087475304. Local number, 46N12E-14.6g4.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit. Owner: U.S. Geological Survey.

AQUIFER.--Ironton and Galesville Sandstones of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10 in. borehole, diameter 1.25 in., depth 1,203 ft, cased to 1,183 ft, 2 in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top coupling on 1.25 in. plastic pipe, 2.73 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--November 1988 to September 1989. Miscellaneous water-level measurements from December 1981 to to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 231.86 ft below land-surface datum, Mar. 14, 1989; lowest, 234.54 ft below land-surface datum, Nov. 26, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	233.58	232.98	232.91	232.77	232.69	232.48	---	233.10	---	---
10	---	---	233.67	233.34	232.80	232.89	232.95	232.80	---	233.07	---	---
15	---	---	233.71	233.07	233.10	232.76	232.63	232.71	---	233.40	---	---
20	---	---	233.41	233.31	232.63	232.77	232.77	---	232.88	233.29	---	---
25	---	---	233.65	232.95	232.71	232.71	232.51	---	232.85	---	---	---
EOM	---	234.15	233.21	232.43	232.74	232.73	232.83	---	---	---	---	---

WTR YR 1989 HIGH 231.86 MAR. 14 LOW 234.54 NOV. 26

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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